

**Annual Drinking Water Quality Report for 2020(Public Water Supply ID#1200248)
Andes Water District #1, P.O. Box 85, Andes, NY 13731**

INTRODUCTION

April 13th, 2021

To comply with State and Federal regulations, the Andes Water District #1 annually issues 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. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and the results of annual sampling. If you have any questions about this report or concerning your drinking water, please contact **Mr. Andy Serrao**, Delaware Operations, 845-676-3990. We want you to know about your drinking water. The Town Board and I are very proud of the improvements we have made in the system and are always open to your comments/suggestions.

WHERE DOES OUR WATER COME FROM?

Andes Water District receives its water from a spring system southeast of the hamlet and has a back-up well behind the library. In general, 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 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 NYSDOH and the FDA also regulate limits for contaminants in bottled water which must provide the same protection for public health.

Your water requires great care in treatment and monitoring. Important new regulations are the Groundwater Rule, Federal Radionuclides Rule, the Stage 2 Disinfectants/Disinfection By-Products Rule, the Lead and Copper Rule and the Long Term 2 Enhanced Surface Water Treatment Rule. For more information about these requirements, call the Water Operators 845-676-3990. As stated above, our water source is a reservoir spring above Route 28 at the east end of the hamlet and a drilled well behind the Library.

OPERATIONAL CONCERNS

Our water system was again safe and reliable in 2020. The district has been performing the usual maintenance. In 2015, the NYS Department of Health has recommended that a secondary well source be developed and the Town has acquired funding to do so. In October of 2016, a test well was sunk above High Street. It was discovered that the water quality there was not sufficient. The District is still seeking a high quality source location. In 2019 and 2020 the Town tried numerous locations for the secondary well source including at Andes Central School. Currently the Town, along with Cedarwood Engineering, is exploring the possibility of treating the water from the High Street test well.

The NYSDEC has notified us that we need to introduce water meters into our system. NYC has indicated that they will assist us in installing meters in the commercial properties. For all other customers, the Town Board hopes to receive grant funding for the meter purchase and installation. Our current annual base rate for water is \$474.

If you have experienced frozen lines in the past, make a plan to allow your water to run at a trickle during very cold snaps. If you have questions about a frozen service, call 845-676-3990. Every frozen service has the potential to increase your water bills but overuse or misuse of water can also increase your costs now that we have filters on our water system! Please don't waste water! This winter has not been as cold as others and the system has not experienced too many frozen service lines.

NYS SOURCE WATER ASSESSMENT

NYS Department of Health has completed a source water assessment on our system, including a susceptibility rating based on the risk imposed by several potential sources of contamination and how easily contaminants can move through the subsurface to the drinking water source. This susceptibility rating is an estimate and does not mean that the water delivered to you our customers is or will become contaminated. While nitrates (and other inorganic chemicals) were detected in our water, all drinking water, even bottled water, may contain at least small amounts naturally and does not necessarily indicate that the water poses a health risk. The nitrate levels, as well as those of inorganic chemicals, are considered low in comparison with other sources in our area.

The source water assessment has rated the well as having a medium-high susceptibility to microbials and nitrates, because of the close proximity of permitted discharge facilities (agricultural facilities which discharge wastewater into the environment and are regulated by state/federal government), septic systems, and low intensity residential activities within the assessment area. The well draws from a confined aquifer, likely providing adequate protection from potential contamination. The spring source is rated as having a medium susceptibility to microbials and other industrial contaminants, due to pasture and row crop land covers in the assessment area, but no permitted discharge or regulated facilities.

Thank you for allowing us to provide you with quality drinking water.

Wayland "Bud" Gladstone, Andes Supervisor

FACTS AND FIGURES

Our water system serves approximately 350 people (139 customers and businesses) in the district.

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, 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 NYSDOH Oneonta District Office at 607-432-3911.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of sample	Level Detected (Maximum) (Range)	Unit Measure -ment	Regulatory Limit (MCL, TT or AL)	MCL G	Likely Source of Contamination
Beta particle and photon activity from manmade radionuclides	No	7/2017	Library Well – 2.6	pCi/L	50 *	0	Decay of natural deposits and man-made emissions.
Iron	No	8/2016	Springs – 10	ug/l	300	N/A	Naturally occurring.
Sodium	No	8/2016	Springs – 18.4	mg/l	(see Health Effects) ¹	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Sulfate	No	8/2016	Springs – 4.9	mg/l	250	N/A	Naturally occurring.
Zinc	No	8/2016	Springs – 0.362	mg/l	5	N/A	Naturally occurring; Mining waste.
Lead	No	8/2020	3.15 ² ND – 5	ug/l	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	8/2020	0.6355 ² 0.034 – 1.09	mg/l	AL=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	8/2020	3.66	ug/l	80	N/A	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Nitrate	No	10/2020	Springs – 0.45	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	No	8/2018	Library Well – 0.918	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Barium	No	10/2020	Springs – 0.011	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nickel	No	8/2018	Library Well – 0.0012	mg/l	N/A	N/A	
Nickel	No	10/2020	Springs – 0.0005	mg/l	N/A	N/A	
Arsenic	No	8/2018	Library Well – 4.9	ug/l	10	N/A	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

Fluoride	No	8/2018	Library Well – 0.18	mg/l	2.2	N/A	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Selenium	No	8/2018	Library Well – 9	ug/l	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Total Haloacetic Acid (HAA5) (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	8/2020	2.9	ug/l	60	N/A	By-product of drinking water disinfection needed to kill harmful organisms.
Chromium	No	10/2020	Springs- 3	ug/l	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.

NOTES:

- * – The State considers 50 pCi/l to be the level of concern for beta particles.
- 1 – 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 of sodium should not be used for drinking by people on moderately restricted sodium diets.
- 2 – The level of lead and copper 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 a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. In this case, 5 samples were collected at your water system and the 90th percentile value was the average of the 2 highest values (lead = 3.15 ug/l and copper = 0.6355 mg/l). The action level for lead was not exceeded at any of the sites tested.

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.

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).

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

A summary of the chemicals to be tested for in upcoming years is available at the WWTP plant 845-676-3990, as well as information on this report.

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. During 2020 our system was in compliance with all applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Our drinking water met state and federal regulations, but as you can see from the above chart, there are naturally occurring substances present because we utilize a surface source. We have noted very low incidence of microorganisms or pathogens. With filtration, chlorination, corrosion control and UV treatment our water is very safe. The following caution is required by NYSDOH and the EPA: 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).

Andes Water District
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