2021 Water Quality Report

Village of De Ruyter
P.O. Box 277
De Ruyter, N.Y. 13052

PWS # 2602373

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Clerk / Treasurer – Ardene Tiffany
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Village Board meetings are held on the 3rd Wednesday of each month at 6:15pm at the Village Clerk's office.

Annual Drinking Water Quality Report for
2021
Village of DeRuyter
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INTRODUCTION

To comply with State regulations, the Village of DeRuyter 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 Aaron Pforter, Water Superintendent, Village of DeRuyter at 315-852-9625 or the Madison County Department of Health at 315-366-2526. 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 third Wednesday of every month at 6:15 P.M. at the Village Clerks Office.

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 643 people through 247 service connections. Our water source is two 60-foot drilled wells which are located in the Village at Smith Park. Our well water is disinfected with chlorine prior to distribution. Water treatment is a standard sodium- hypochlorite solution.

Village Water Rates

	Minimum Rate Up to 5,999 gallons	6,000 – 39,999 gallons	Over 40,000 gallons
Village Users	$40.00	$1.50 per 1,000 gallons	$1.38 per 1,000 gallons
Outside Village Users	$45.00	$2.00 per 1,000 gallons	$1.88 per 1,000 gallons
DeRuyter Central School	$200.00	$1.50 per 1,000 gallons	$1.38 per 1,000 gallons

WATER BILLS ARE MAILED OUT QUARTERLY

Consider This

A family of 4 can expect to consume approximately 80,000 gallons of water per year. This would cost $240.00. If you were to do the math, you would find that 1 penny will buy you a little over 3 gallons of water.

NEW YORK STATE DEPARTMENT OF HEALTH SOURCE WATER ASSESSMENT

The NYSDOH 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 susceptibility ratings based on the risk posed by each potential source contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it **does not mean** that the water delivered to consumers is, or will become contaminated. See **the "table of detected contaminants"** for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source water into the future. The public water supply serving the Village of DeRuyter is derived from wells. The source water assessment has rated these wells as having high susceptibility rating for nitrates and medium-high susceptibility to industrial solvents, other industrial contaminants and microbes. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge waste water into the environment and are regulated by the state and/or federal government) and land use practices(pastures) identified within the assessment area. Based on submitted data, the wells draw water from fractured bedrock and low permeability layer exist above the aquifer. Please note that, while the source water assessment rates the wells as being susceptible to microbial, the water is disinfected to ensure that the finished water delivered into your home

meets the New York State drinking water standards for microbial contamination. County and State Health Departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs. If you should have any questions or would like to review the Source Water Assessment in our office please contact the Madison County Department of Health at 315-366-2526.

The Madison County Planning Department has issued a groundwater/wellhead protection report for the Village of DeRuyter. Copies of this report are available by contacting the DeRuyter Water Department. In summary, the following recommendations have been made:

-Register petroleum bulk storage tanks with DEC and/or EPA.
-Encourage proper septic maintenance to include pumping every 5 years.
-Notify surrounding planning boards of groundwater protection concerns.
-Review surrounding pesticide use, as well as storage and mixing sites.
-Petroleum bulk storage inventory.
-Publicize County household hazardous waste days.
-Environmental Audits of Local Businesses.

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, 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.

In 2018, we were required to collect and analyze drinking water samples for the following unregulated contaminants; HAA6BR compounds, HAA9 compounds, manganese, bromide, germanium, alphahexachlorocyclohexane, chlorpyrifos, dimethipin, total permethrin, oxyfluorfen, prophenofos, tebuconazole, tribufos, ethoprop, butylated hydroxyanisole, o-toluidine, quinolone, 1- butanol, 2- methoxyethanol, 2-propen-1-ol and total organic carbon. The table presented below depicts which of these unregulated compounds were detected in your drinking water. If you have any questions about unregulated contaminants, please contact Aaron Pforter, Water Superintendent, Village of DeRuyter at 315-852-9625 or the Madison County Department of Health at 315-366-2526.

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 Madison County Health Department at 315-366-2526.

Table of Detected Contaminants							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected Avg/Max (Range)**	**Unit**	**MCLG**	**Regulatory Limit (MCL, TT or AL)**	**Likely Source of Contamination**
Inorganic Compounds							
Lead **See footnote #1**	N	9/22/20	2.4 Range (ND – 3.1)	ppb	15	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Copper **See footnote #1**	N	9/22/20	0.137 Range (0.046 – 0.141)	ppm	1.300	AL = 1.300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Sodium **See footnote #2**	N	8/26/21	44	ppm	NA	20	Erosion of natural deposits; water softeners, animal wastes, road salt.
Barium	N	9/8/20	0.113	ppm	2.000	2.000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate	N	8/26/21	4.0	ppm	10	10	Runoff from fertilizer and erosion from natural deposits.
Asbestos	N	12/15/21	0.062	MFL	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.
Radiological Compounds							
Gross Alpha **See footnote #3**	N	11/10/20	1.32	PCi/l	0	15	Erosion of natural deposits.
Ra226 + Ra228 **See footnote #3**	N	11/10/20	1.082	PCi/l	0	5	Erosion of natural deposits.

Synthetic Organic Contaminants including Pesticides and Herbicides

Perfluoroctane Sulfonic Acid (PFOS)	N	2/18/21 6/24/21 8/26/21 12/15/21	2.20 2.72 3.38 2.58	ng/L	NA	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorobutane Sulfonic Acid (PFBS)	N	6/24/21 12/15/21	0.585 0.641	ng/L	NA	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorohexane Sulfonic Acid (PFHXS)	N	6/24/21 8/26/21 12/15/21	1.93 2.29 2.17	ng/L	NA	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluoroctanoic Acid (PFOA)	N	6/24/21 8/26/21 12/15/21	0.619 0.668 0.712	ng/L	NA	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorohexanoic Acid (PFHXA)	N	6/24/21 8/26/21 12/15/21	1.58 1.55 1.64	ng/L	NA	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluoroheptanoic Acid (PFHPA)	N	12/15/21	0.712	ng/L	NA	10	Released into the environment from widespread use in commercial and industrial applications.

Disinfection By Products

Total Trihalomethanes	N	8/26/21	0.024	ppm	N/A	0.080	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids	N	8/26/21	0.0054	ppm	Na	60	By-product of drinking water disinfection needed to kill harmful organisms.

Unregulated contaminants

Bromide	N	6/18/18 11/14/18	53.1210 57.1270	ppb ppb	N/A N/A	N/A	Effluent from coal-fired power; wastewater from hydraulic fracturing; textile production; agricultural runoff; some fertilizers; and road salt.
HAA6BR	N	5/15/18 11/14/18	7.7490 5.5820	ppb ppb	N/A	N/A	By-product of drinking water disinfection needed to kill harmful organisms.
HAA9	N	5/16/18 11/14/18	10.7350 8.1090	ppb ppb	N/A	N/A	By-product of drinking water disinfection needed to kill harmful organisms.
Manganese	N	5/16/18 11/14/18	1.0920 1.1720	ppb ppb	N/A	300	Naturally occurring; Indicative of landfill Contamination.

Footnotes:

1 – The level presented represents the 90th percentile of the 10 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, ten samples were collected at your water system and the 90th percentile value was the 0.137 ppm for copper and 2.4 ppb for lead. The action level for copper was not exceeded at any of the sites tested. The action level for lead was not exceeded at any of the sites tested.

2 – Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

3 – A MCL violation occurs when the annual composite of four quarterly samples or the average of the analysis of four quarterly samples exceeds the MCL.

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.

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).

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

Not Applicable (N/A): A MCLG is Not Applicable for this contaminant.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL 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 be higher than at other homes in the community as a result of materials used in your home's plumbing. The Village of DeRuyter 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2021, our system was in general compliance with most 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
- 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.

Conservation Tips

- 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.
- Use low flow showerheads and faucets.
- 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 per day from an invisible toilet leak.
- 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 has moved, you have a leak.
- Water your lawn sparingly early morning or late evening.

YEARLY WATER REPORT

	GALLONS PUMPED	BILLED GALLONS	GALLONS LOST	PERCENT LOST	GALLONS PER DAY LOST
2021	12,859,000	11,095,365	1,763,632	8.628%	4,832
2020	11,265,000	9,846,717	1,418,283	8.74%	3,886
2019	13,611,000	12,249,900	1,361,100	9.00%	3,729
2018	13,521,000	12,168,900	1,352,100	9.00%	3,704
2017	12,909,000	11,747,190	1,161,810	9.00%	3,183
2016	15,057,000	13,250,248	1,806,752	8.0%	4,950
2015	13,041,000	11,997,640	1,043,360	8.0%	2,859
2014	13,317,000	11,572,473	1,744,524	13.1%	4,780
2013	15,399,000	13,326,700	2,072,300	13.48%	5,678
2012	14,448,700	13,103,100	1,345,600	9.31%	3,687
2011	15,949,000	12,124,000	3,824,100	23.98%	10,477
2010	16,892,000	13,777,400	3,114,600	18.44%	8,533
2009	16,219,000	13,078,400	3,140,600	19.36%	8,604
2008	16,376,000	12,930,100	3,445,900	21.04%	9,441
2007	15,442,000	13,329,000	2,113,000	13.68%	5,789
2006	16,636,000	14,013,200	2,622,800	15.77%	7,186
2005	16,883,000	14,002,900	2,880,100	17.06%	7,891
2004	16,656,000	13,867,900	2,788,100	16.74%	7,639
2003	18,444,000	15,123,200	3,320,800	18.00%	9,098
2002	19,289,000	16,155,100	3,133,900	16.25%	8,586

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. If you have any questions or concerns, feel free to contact me at 315-852-9625.

Sincerely,

Aaron Pforter
Water Superintendent