

Annual Drinking Water Quality Report for 2023
Town of Madrid
3529 County Route 14
(Public Water Supply ID# 4404389)

INTRODUCTION

To comply with State and Federal regulations, The Madrid Water District 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. 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 Bill Barkley (315) 322-5606, or the New York State Department of Health at 386-1040. 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 the second Wednesday of every month at 7:00 pm at the Town 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 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 source is two drilled wells, located on State Street, in the Town of Madrid. The water is chlorinated and treated for corrosion control at the treatment plant prior to distribution. Our water system serves approximately 800 consumers through 265 service connections.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. 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 Health Department at (315) 386-1040.

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.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measurement	MCL G	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Combined Radium 226 and 228 Gross Alpha Activity	No No	2020 2020	3.04 0.91	Pci/L Pci/L	5 15	5 15	Decay of natural deposits
Total Trihalomethanes (includes Bromodichloromethane, Bromoform, Chloroform, and Dibromochloromethane)	No	2023	13.7	ug/L	80	N/A	By product of drinking water chlorination needed to kill harmful organisms
Haloacetic acids (includes Dichloroacetic Acid, Monobromoacetic Acid, Monochloroacetic Acid, and Trichloroacetic Acid)	No	2023	2.6	ug/L	60	N/A	Byproduct of drinking water chlorination needed to kill harmful organisms
Barium	No	2023	0.048	mg/L	2.0	N/A	Erosion of natural deposits;
Fluoride	No	2023	0.23	mg/L	N/A	2.2	Erosion of natural deposits;
Lead	No	2021	2.9 (<1.0-3.8)	ppb	15	15	Corrosion of household plumbing systems; Erosion of natural deposits.
Sodium	No	2021	44	mg/L	N/A	N/A	Naturally occurring; Road salt; Water softeners
Copper	No	2021	0.10 (0.028-0.17)	ppm	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits.

Notes:

Lead and Copper Monitoring: The results of lead and copper tests above represent the 90th percentile, and range of levels detected. Every three years, we are required to test 10 residences for lead and copper. We will be testing again in the summer of 2024.

Sodium: Water containing sodium in amounts greater than 20 mg/L should not be used for drinking by people on severely restricted sodium diets. Our water contained 44 mg/l in the 2021 test. We test both wells every three years for sodium.

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.

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.

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.

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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, there were no violations.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Our water contained 44 mg/L Sodium in the last test. According to the New York State Department of Health, 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.

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.
- ♦ 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.

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. 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 be contaminated. While inorganic and organic 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, industrial, and/or residential 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. 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 2 drilled wells. The source water assessment has rated these wells as having a high susceptibility to microbials, organics, nitrates and inorganics. These ratings are due primarily to residential land use, septic systems, agricultural practices, and industrial/commercial facilities in close proximity to the wells that discharge wastewater into the environment and are regulated by the state and/or federal government. In addition, the wells draw from an unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer for protection from potential sources of contamination. In 2005, however, a study conducted by the Water District and the Department of Health which considered bacterial tests and temperature monitoring led to a determination by the Health Department that "...well 1 and well 2 have been determined to not be under the influence of surface water..." Please note that our water is disinfected to ensure that the finished water delivered into your home meets the New York State's drinking water standards for microbial contamination.

A copy of the assessment can be obtained by contacting us at 322-5606 or by mail at the Town of Madrid, 3529 CR 14, Madrid NY 13660.

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. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.