

Barnes Rural Water District

2024 Consumer Confidence Report

Annual Drinking Water Quality Report

We are pleased to provide you with this year's Annual Drinking Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act. This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Our water source is groundwater from four 220 feet deep wells drawn from the Spiritwood Aquifer. Each well produces approximately eight hundred gallons/minute.

Barnes Rural Water District participates in North Dakota's Wellhead Protection Program. The program was established through ND Rural Water Systems Assoc. and the ND Department of Environmental Quality. Barnes Rural Water District's four 220 feet deep wells are protected from chemical contaminants leaching downward through the soil due to the beneficial soil type over the well field area. The soil consists of an unsorted mixture of clay and silt and is thick overlying the water-bearing aquifer. Based on texture, permeability, and depth, the soil's potential to protect the quality of the groundwater from surface contamination incidents is excellent.

A copy of the Wellhead Protection Plan along with other relevant information is available from our office during normal business hours. The ND Department of Environmental Quality has prepared a Source Water Assessment for Barnes Rural Water District. Information on this program is also available to the public during normal business hours.

Our public water system, in cooperation with the ND Department of Environmental Quality, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the ND Department of Environmental Quality has determined that our source water is **"not likely susceptible"** to potential contaminants. No significant sources of contamination have been identified.

If you have any questions regarding this report or concerning your water utility, please contact **Perry Kapaun at (701) 845-1117 or Toll Free 1-877-845-1117, or contact us at 421 W. Main, Valley City, ND 58072.** We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the last Wednesday of each month at 7:00 a.m. in the Barnes Rural Water District's office. If attendance is desired, please call the office in advance, for further information. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call the office at the number listed above.

The Barnes Rural Water District would appreciate it if large volume water customers would please post copies of the **Consumer Confidence Report** in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill can learn about our water system.

Barnes Rural Water District routinely monitors for contaminants in your drinking water per Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2024. As authorized and approved by EPA, the state has reduced monitoring requirements for certain

contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for inorganic contaminants], though representative, is more than one year old.

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table are the only contaminants detected in your drinking water. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels.

Please call **Perry Kapaun at (701) 845-1117** if you have questions. Barnes Rural Water District works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amounts of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

(MCLG) Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

(MCL) Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

(MRDLG) Maximum Residual Disinfectant Level Goal: 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 contaminants.

(MRDL) Maximum Residual Disinfectant Level: 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.

Highest Compliance Level: The highest level of that contaminant used to determine compliance with a National Primary Drinking Water Regulation.

Range of Detections: The lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points.

Abbreviations: ppb - parts per billion or micrograms per liter; ppm - parts per million or milligrams per liter; ppt - parts per trillion or nanograms per liter; ppq - parts per quadrillion or picograms per liter; NA - not applicable; ND - none detected; pCi/L - picocuries per liter (a measure of radioactivity), umho/cm = micromhos per centimeter (a measure of conductivity), obsvns = observations/field at 100 Power, IDSE = Initial Distribution System Evaluation

TEST RESULTS – BARNES RURAL WATER DISTRICT – ND0201058

Lead/Copper	Date	# Samples	Action Level (AL)	Level Detected	Units	Range	Violation Yes/No Other Info	Likely Source of Contaminant
Copper	7/7/2023	20	1.3	0.243 90th Percentile	ppm	ND to 0.535	0 Sites Exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	7/7/2023	5	15	No Detect 90th Percentile	ppm	ND to 1.09	0 Sites Exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
Inorganic Contaminants								
Nitrate-Nitrite	5/1/2024	10	10	0.084	ppm	N/A	No	
Disinfectants								
Chlorine	5/31/2024	MRDL=4.0	MRDLG=4	3.6	ppm	3.15 to 3.7	No	Water additive used to control microbes
Unregulated Contaminants								
Manganese	4/9/2018			0.032	ppm	N/A	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Stage 2 Disinfection Byproducts (TTHM/HAA5)								
HAA5	12/31/2024	60		2	ppb	N/A	No	By-product of drinking water chlorination
TTHM	12/31/2024	80		3	ppb	N/A	No	By-product of drinking water chlorination

The water we provide is treated with fluoride addition as a part of the water treatment process to enhance dental health. For information regarding the level of fluoride in the finished water provided to our consumers, please contact our office.

Health Statements

Drinking water, including bottled water, may reasonably be 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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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 activity.

Contaminants That May Be Present in Source Water:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. (Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Herbicide: Any chemical(s) used to control undesirable vegetation.)

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Lead Statement

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney, or nervous system problems. Contact your health care provider for more information about your risks

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in

service lines and in home plumbing. Barnes Rural Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home.

Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly.

Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Barnes Rural Water. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>

Lead Service Line Inventory Information

US EPA has recently published the Lead and Copper Rule Revision. The purpose of this revision is to strengthen public health protections by removing lead service lines within public water systems. One requirement of this rule revision was to inventory all drinking water service lines within our public water system and notify consumers which type of line serves each property. You may have recently received a letter from our system with this information.

The inventory is a listing of all service lines and the material composition of each line. The types of lines being documented are Lead lines, Galvanized Requiring Replacement (GRR) and lines made of Unknown Material. Classification of a service line as being comprised of Unknown Service Line material indicates that our system cannot currently confirm the material of both the public and private portions of the line with written records. Non-lead lines were also documented; however, we were not required to notify consumers with documented nonlead lines. The classification of the type of service line serving a residence was based on historical data regarding the property and in some cases verification of the type of material on the privately owned side of the line by visual inspection or replacement records of the owner.

The current Service Line Inventory for our system has been completed and is available for viewing at our office. Please contact Barnes Rural Water District at 701-845-1117 should you have any questions.

Additional work to update the service line inventory, including inspection of the line, may need to be performed to further document and confirm the type of material making up both the public and private portions of the line serving your home or business. We will need the help of home/building owners in order to access the service line on the private side of the service line to positively identify the material of the line that carries water within your home/building. Our system may perform this work with our own system employees, or we may contract with engineering firms or third-party contractors to complete this work to improve our service line inventory.

The logo features the word "Quality" in a large, blue, serif font. Below it, the letters "R", "W", and "D" are partially visible in a smaller, similar font, suggesting the organization's name is "Quality Rural Water District".