

Annual Drinking Water Quality Report

Riverdale, North Dakota

2024

We're very pleased to provide you with this year's Annual Drinking Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is to provide you with a safe and dependable supply of drinking water. Our water source is surface water from Lake Sakakawea. Riverdale treats the water by membrane filtration. Chlorine is used for disinfection.

The North Dakota Department of Health has prepared a Source Water Assessment for Riverdale. Information on this program is available at the Auditors office.

Our public water system, in cooperation with the North Dakota Department of Health, 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 North Dakota Department of Health has determined that our source water is moderately susceptible to potential contaminants. No significant sources of contamination have been identified.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Clay Kruger, Water Superintendent, at 1-701-654-7636. 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 2nd Monday of every month in the Riverdale City Hall, starting at 7:00 PM. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Clay at the number listed above.

The City of Riverdale would appreciate it if large volume water customers would please post copies of this Annual Drinking Water Quality 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.

The City of Riverdale routinely monitors for contaminants in your drinking water according to 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, though representative, is more than one year old.

The water we provide is treated with fluoride addition as 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 at 1-701-654-7636.

Other requirements which a water system must follow

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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The “Goal” (MCLG) is 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 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 pictograms 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

*Nephelometric Turbidity Unit (ntu) - *

*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The lowest monthly percentage of samples Meeting turbidity limits was 100%. The highest single turbidity measurement of 0.02 NTU was measured during the year.

TEST RESULTS for RIVERDALE								
	<u>MCL G</u>	<u>MCL</u>	<u>Level Detected</u>	<u>Unit Measureme nt</u>	<u>Range</u>	<u>Date (year)</u>	<u>Violation Yes/No Other Info</u>	<u>Likely Source of Contamination</u>
Lead/Copper								
<i>Copper</i> Number of samples=6	1.3	AL=m 1.3	0.4 90 th % Value	ppm	ND to 0.546	8/16/ 2022	0 Sites exceede d AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead Number of samples=6	15	AL= 15	1.33 90 th % Value	ppb	ND to 1.71	8/16/ 2022	0 Sites exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
Disinfectants								
Chloramine	MR DL =4.0	MRD L =4	2.7	ppm	2.3to 2.9	1/31/ 2024	No	Water additive used to control Microbes.
Turbidity <i>Lowest Monthly Percentage of Samples meeting Turbidity Limits = 100</i>								
Turbidity	N/A	TT	.02 *	NTU	0.0 to .15	2024	No	Clarity of water
Stage 2 Disinfection Byproducts								
HAA5 System Wide	60	60	22	ppb	N/A	12/31/ 2024	No	Byproduct of chlorine disinfection
TTHM System Wide	80	80	42	ppb	N/A	12/31/ 2024	No	Byproduct of chlorine disinfection
Inorganic Contaminants								
Nitrate-Nitrite	10	10	0.069	ppm	N/A	5/7/ 2024	No	Naturally occurring ions that are part of the nitrogen cycle

Total Organic Carbon Removal								
Alkalinity-Source			165	MG/L	135.00 to 165.00	12/31/2024	No	Measure of water to Neutralize acidity.
Carbon, Total Organic (TOC)-Finished			3.02	MG/L	2.46 to 3.02	3/31/2024	No	Organic pollution of water after treatment
Carbon, Total Organic (TOC)-Source			3.62	MG/L	2.50 to 3.62	5/31/2024	No	Organic pollution of water before treatment

Unregulated Contaminants								
Bicarbonate as HCO ₃			201	ppm	165-201	12/9/2024	No	Polyatomic Ion
Alkalinity, Carbonate			2	ppm	ND-2	12/9/2024	No	Carbonate and Bicarbonate anions in a solution

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water.

USEPA 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 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 to notify consumers with documented non-lead 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 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 City of Riverdale at 1-701-654-7636 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.

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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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap 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 storm water 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 storm water 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 storm water 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 Administrations (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

microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 breast-fed), 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 breast-fed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Riverdale 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 The City of Riverdale at 1-701-654-7636. 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>.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

The City of Riverdale works diligently to provide top quality water to every tap. 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.