2022 Drinking Water Quality Report
Mooreton, ND

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the safe clean water we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is Southeast Water User's well that draws from the Hankinson Aquifer, located in the Sheyenne Grasslands, approximately three miles south of Mantador, North Dakota.

The Southeast Water Users have a wellhead protection plan in place. Information on this plan can be obtained at the Southeast Water Users office in Mantador, North Dakota. Based on their information, our source water has been determined to be moderately susceptible to potential contaminants. They have reviewed the well head protection area and determined that no sources would threaten our water supply.

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 Neil Klosterman (701) 274-8888. 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 second Wednesday of each month at the Mooreton Community Hall at 7:00 PM. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Neil Klosterman at the number listed above.

The City of Mooreton would appreciate it if large volume water customers would please post copies of the year's 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 Mooreton 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 1, 2018 to December 30, 2022.

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 organic or inorganic contaminants], though representative, is more than one year old.

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 stormwater, industrial or domestic wastewater discharges, oil production, mining or farming.

Pesticides and herbicides, which come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

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, the Environmental Protection Agency (EPA) prescribes regulations, which limit the amount 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've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/L) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L)- one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000

Parts per trillion (ppt) or Nanograms per liter (nanograms/L) - one part per trillion corresponds to one minute in 2,000 ,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/L) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi.-L) - picocuries per liter is a measure of the radioactivity in water.

Action level (AL)- the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (Tl) - 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 " (MCI.G) 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.

2022 TEST RESULTS FOR THE CITY OF MOORETON, ND & SOUTHEAST WUD (EAST)

Contaminant	MCLG	MCL	Level Detected	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Likely Source of Contamination
Lead/Copper								
Copper	1.3	AL= 1.3	0.51 90th % Value	ppm	NA	2021	0 Sites exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	0	AL= 15	No Detect 90th % Value	ppb	NA	2021	0 Sites exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
Stage 2 Disinfection Byproducts								
Total Haloacetic Acids (HAA5)	NA	60	9	ppb	NA	2020	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	NA	80	15	ppb	NA	2020	No	By-product of drinking water chlorination
Disinfectants								
Chlorine Residual	MRDLG =4	MRDL =4.0	1.1	ppm	0.87 to 1.29	2022	No	Water additive used to control microbes
Inorganic Contaminants								
Nitrate-Nitrite	10	10	ND	ppm	NA	2022	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	2	2	0.247	ppm	NA	2018	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	100	100	1.58	ppb	NA	2018	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	4	4	0.733	ppm	NA	2018	No	Erosion of natural deposits; water additive which promotes stronger teeth; discharge from fertilizer and aluminum factories.
Unregulated Contaminants								
Alkalinity, Total	NA	NA	228	ppm	NA	2018	No	
Bicarbonate as HCO3	NA	NA	279	ppm	NA	2018	No	
Calcium	NA	NA	75.4	ppm	NA	2018	No	
Chloride	NA	NA	5.19	ppm	NA	2018	No	
Conductivity	NA	NA	478	umho/cm	NA	2018	No	
Total Hardness	NA	NA	247	ppm	NA	2018	No	
Magnesium	NA	NA	14.2	ppm	NA	2018	No	
Nickel	NA	NA	0.00467	ppm	NA	2018	No	
pH	NA	NA	7.69	pH	NA	2018	No	

Potassium	NA	NA	2.4	ppm	NA	2018	No	
Sodium Absorption Ratio	NA	NA	0.08	obsrvn	NA	2018	No	
Sulfate	NA	NA	25.8	ppm	NA	2018	No	
TDS	NA	NA	265	ppm	NA	2018	No	
Zinc	NA	NA	0.112	ppm	NA	2018	No	

*No tests for Lead or Copper exceeded Action Level

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.

*If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Mooreton is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. **Use water from the cold tap for drinking and cooking. 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 two minutes before using water for drinking or cooking**. If you are concerned about lead in your drinking 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 or at http://www.epa.gov/safewater/lead.

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/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).

Please call our office at (701) 274-8888 if you have questions.

The City of Mooreton 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.

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

As you can see from the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. 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.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminant s. The presence of contaminants does not necessarily indicate that the water poses a health risk More information about contaminants and potential effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to provide your family with clean, quality 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. These improvements sometimes require rate structure adjustments.

Please call our office if you have questions.

The City of Mooreton works around the clock 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.