The 2019
Annual Drinking Water Quality Report

City of Mott, North Dakota

The City of Mott, as required by the Federal Safe Drinking Water Act (SDWA), has prepared and is distributing to our customers this year's annual drinking water quality report. This is our opportunity to share information on the quality of water we provide to your home, apartment, or business. In addition, this report is an educational tool that allows us to inform you where our water comes from. It is our daily goal to provide you with safe and dependable supply of drinking water.

We purchase our water from Southwest Water Authority (SWA), who is in charge of the Southwest Pipeline Project. The source of Southwest Pipeline Water is Lake Sakakawea, a surface water source. The intake draws water from a depth of 50 to 80 feet, depending on the lake level, which can vary significantly from year to year. This water is pumped to Dodge, where chlorine and ammonia (chloramines) are added to inactivate Giardia, viruses, and other microorganisms. The partially treated water is then delivered to the lime-softening treatment plant at Dickinson. Here the water is clarified, softened, filtered, and disinfected before being delivered to customers.

The source water assessment is complete and available at SWA. (Contact the SWA office at 1-888-425-0241 for more information). The beneficial use status of Lake Sakakawea providing source water for the SWA public water system is classified as fully supporting, while the potential contaminant sources in the source water protection area are of low concern. The SWA public water system is classified as **moderately susceptible.** Although the SWA public water system is classified as moderately susceptible to the source water's potential contaminant sources, it should be noted that historically, SWA has effectively treated this source water to meet drinking standards.

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 health 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.

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.

As you can also see by the table, our system had no violations. We're 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.

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 (800-426-4791).

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 Mott 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 2 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.

If you have any questions regarding this report or concerning your water utility, please contact **Kerry Mosbrucker, Water System Manager, at 824-2163.** If you want to learn more, please attend any of our regularly scheduled meetings held on **the second Monday of each month at 7:00 pm at the Mott City Hall.** If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Mott City Hall at the number listed above.

The City of Mott would appreciate it if large volume water customers post copies of the CCR 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.

This report will not be mailed. Copies of this report are available upon request at the office of the City Auditor, Mott, ND.

Southwest Water Authority - Table of Detected Contaminants							
Contaminant (units)	**MCLG**	**MCL**	**Level Detected**	**Detection Range**	**Test Date**	**Exceedance or Violation**	**Major Sources in Drinking Water**
Microbial Contaminants							
Turbidity** (NTU)	N/A	TT=.3	0.17	N/A	2019	100% of samples met turbidity limit	Soil Runoff.
Total Coliform Bacteria	0	1	0	N/A	2015	NO	Naturally present in the environment.
Fecal Coliform & E. coli	0	1	0	N/A	2015	NO	Human and animal fecal waste
Total Organic Carbon (TOC) Removal							
Alkalinity (ppm) Source Water	N/A	N/A	163	140-166	2019	N/A	Natural erosion, plant activities, and certain industrial waste discharges.
TOC (ppm) Source Water	N/A	TT	3.92	3.28-3.92	2019	N/A	Naturally present in the environment.
TOC (ppm) Finished Water	N/A	TT	2.85	2.14-2.85	2019	N/A	Naturally present in the environment.
Inorganic Contaminants							
Barium (ppm)	2	2	0.0126	N/A	2016	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	4	4	0.92	N/A	2016	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate-Nitrite (ppm)	10	10	0.081	N/A	2019	NO	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits
Selenium (ppb)	50	50	1.12	N/A	2010	NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Disinfectants							
Chloramines (ppm)	MRDLG = 4	MRDL = 4.0	3.1	2.8-3.2	2019	NO	Water additive used to control microbes
Disinfection Byproducts							
HAA5 (ppb)	0	60	23	N/A	2019	N/A	By-product of drinking water disinfection.
TTHM (ppb)	0	80	11	N/A	2019	N/A	By-product of drinking water disinfection.
Radioactive Contaminants							
Gross Alpha, including Ra, excluding Rn & U (p/Ci/l)	15	15	0.359	N/A	2018	NO	Erosion of natural deposits
TABLE OF DETECTED UNREGULATED CONTAMINANTS****							
Alkalinity, Carbonate (ppm)	N/A	N/A	5	ND – 5	2016	N/A	Natural erosion, plant activities, and certain industrial waste discharges.
Bicarbonate as HCO3 (ppm)	N/A	N/A	199	170-199	2019	N/A	Natural erosion, plant activities, and certain industrial waste discharges.
Bromide (ppm)	N/A	N/A	33	27-35	2019	N/A	N/A
Calcium (ppm)	N/A	N/A	36.8	N/A	2016	N/A	N/A
Chloride (ppm)	N/A	N/A	13.8	N/A	2016	N/A	N/A
Conductivity @25 C (umho/cm)	N/A	N/A	621	N/A	2016	N/A	N/A
Hardness Total (as CaCo3) (ppm)	N/A	N/A	155	N/A	2016	N/A	N/A
Magnesium (ppm)	N/A	N/A	15.2	N/A	2016	N/A	N/A
pH (pH)	N/A	N/A	8.76	N/A	2016	N/A	N/A
Potassium (ppm)	N/A	N/A	4.4	N/A	2016	N/A	N/A
Sodium (ppm)	N/A	N/A	71.8	N/A	2016	N/A	N/A
Sodium Absorption Ratio (obsvns)	N/A	N/A	2.51	N/A	2016	N/A	N/A
TDS (ppm)	N/A	N/A	391	N/A	2016	N/A	N/A

City of Mott-Table of Detected Contaminants							
Contaminant (units)	**MCLG**	**MCL**	**Level Detected**	**Detection Range**	**Test Date**	**Exceedance or Violation**	**Major Sources in Drinking Water**
Lead / Copper							
Copper	N/A	N/A	0.0364	N/A	2017	N/A	Natural erosion, plant activities, and certain industrial waste discharges.
Lead	N/A	N/A	No Detect	N/A	2017	N/A	Naturally present in the environment.

Maximum Contaminant Level Goal or 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 Contaminant Level or MCL - 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 Residual Disinfectant Level or 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 or 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.
Micromhos per centimeter (umho/cm) a measure of conductivity.
Observations/field at 100 power (obsvns)
Parts per billion or ppb: 1ppb is equivalent to adding 1 pound of a contaminant to 999,999,999 pounds of water (about 120,000,000 gallons)
Parts per million or ppm: 1ppm is equivalent to adding 1 pound of a contaminant to 999,999 pounds of water (about 120,000 gallons)
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.
N/A: Not Applicable ***ND***: Not Detected ***NTU***: Nephelometric Turbidity Units

**** 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.
**** EPA has not established enforceable drinking water standards for unregulated contaminants, but they are monitored to determine whether or not future regulation is warranted.

Source Water Microbiological Monitoring:
Southwest Water Authority has a program of testing its untreated water supply for Cryptosporidium, Giardia, and E. Coliform as part of Round 2 of the Long Term 2 Enhanced Surface Water Treatment Rule.
Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. SWA monitoring did not detect any presence in the source water.
Giardia is a microbial parasite commonly found in source water. SWA monitoring did not detect any presence in the source water.
Filtration, as used at the Dickinson Water Treatment Plant effectively removes Giardia.
E. Coliform is a pathogenic bacteria commonly found in surface water and originates in the intestinal tract of warm blooded animals. Our monitoring did not detect any presence in the source water.
To obtain information about these tests you may call 1-888-425-0241 or email at swa@swwater.com.