

# 2017

## Annual Drinking Water Quality Report

### Prairie View HOA, Williston ND

We're 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 are committed to ensuring the quality of your water. Our water source is supplied by the city of Williston.

Prairie View HOA (formerly known as Lukenbill Estates) is participating in North Dakota's Wellhead Protection Program. The North Dakota Department of Health has also prepared a Source Water Assessment.

Prairie View HOA 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.

If you have any questions about this report or concerning your water utility, please contact Marie Pierce @ (919) 240-4045. 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. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Marie @ the number listed above.

Prairie View HOA 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.

Prairie View HOA routinely monitors for contaminants in your drinking water per Federal and State laws. The table below shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2017. 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.

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 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 include:

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

**Pesticides and herbicides**, which come from a variety of sources such as agriculture, urban storm water 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.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the number 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:

**Not applicable (NA), No Detect (ND)**

**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 ( $\mu\text{g/l}$ )** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Picocuries per liter (pCi/l)** –Pico curies 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 (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.

## 2017 Test results for Prairie View HOA & the city of Williston, ND

<u>Contaminant</u>	<u>MCLG</u>	<u>MCL</u>	<u>Level Detected</u>	<u>Unit</u>	<u>Range</u>	<u>Date</u>	<u>Violation Yes/No Other Info</u>	<u>Likely Source of Contamination</u>
<b>Lead/Copper</b>								
Copper	1.3	AL=1.3	No Detect 90 <sup>th</sup> % value	ppm	N/A	2015	0 Sites Exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	0	AL=15	No Detect 90 <sup>th</sup> % value	ppb	N/A	2015	0 Sites Exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
<b>Disinfectants</b>								
Chloramines Residual	MRDLG =4	MRDL =4.0	1.0	ppm	0 to 1.05	2017	No	Water additive used to control microbes
<b>Stage 2 Disinfection By-Products (System-Wide)</b>								
HAA5	N/A	60	10	ppb	N/A	2017	No	By-product of drinking water chlorination
TTHM	N/A	80	14	ppb	N/A	2017	No	By-product of drinking water chlorination
<b>Microbiological Contaminants -Williston</b>								
Turbidity*	NA	TT	0.17	NTU	N/A	2017	100% of samples met turbidity limits	Soil runoff
<b>Inorganic Contaminants-Williston</b>								
BARIUM	2	2	0.0143	Ppm	NA	2016	No	Erosion of natural deposits, discharge of drilling wastes
CHROMIUM	100	100	1.17	Ppb	NA	2016	No	Discharge from steel and pulp mills: erosion of natural deposits
FLUORIDE	4	4	0.81	Ppm	NA	2016	No	Erosion of natural deposits, water additive which promotes strong teeth
Nitrate-Nitrite (as Nitrogen)	10	10	0.15	ppm	NA	2017	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
SELENIUM	50	50	1.44	ppb	NA	2016	No	Erosion of natural deposits, discharge from petroleum and metal refineries.
<b>TOTAL ORGANIC CARBON REMOVAL (WILLISTON)</b>								
Alkalinity, Source-Williston	NA	NA	178	mg/l	100.0 to 178.0	2017	No	Natural erosion, certain plant activities, certain industrial wastewater discharges
Carbon, Total Organic (TOC) – Finished- Williston	NA	TT	4	MG/L	1.90 to 4	2017	No	Naturally present in the environment
Carbon, Total Organic (TOC)-Source- Williston	NA	TT	7.9	MG/L	3.10 to 7.90	2017	No	Naturally present in the environment

## Surface Water Treatment Rule Monitoring Data:

Lowest Monthly Percentage of Samples Meeting Turbidity Limits= 100

Highest Single Measurement = 0.17

\*Turbidity is a measure of the cloudiness of the water. The city of Williston monitors it because it is a good indicator of the effectiveness of their filtration system. Turbidity is measured every four hours during treatment plant operations. 100% of samples met turbidity limits.

### Additional Monitoring:

The City of Williston conducted source water monitoring for Cryptosporidium, Giardia, Ecoli, and turbidity as part of the Long Term 2 Enhanced Surface Water Treatment Rule. The purpose of the LT2ESWTR is to protect public health from illnesses due to Cryptosporidium and other microbial pathogens. Cryptosporidium is a microbial pathogen found in surface water though out the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100% safe removal. In accordance with this rule Cryptosporidium, Giardia, E-coli, and turbidity samples were taken monthly between November of 2014 and October 2016 from the raw water line and analyzed by certified laboratories. Results were used to determine “bin” classification, which determines whether further treatment for Cryptosporidium is needed. Our monitoring placed us in Bin 1 (< 0.075 oocysts/L), which requires no additional treatment.

Source Water Monitoring			
Microbial Contaminant	Total	Average	Range
Cryptosporidium, oocysts/L	.6	0.025	0-.2
Giardia, cysts	59	2.46	0-19
Ecoli, per 100ml	916.4	38.18	0->200.5
Turbidity, ntu	n/a	140	7.2 – 696.4

**Violation: Disinfectants and Disinfection Byproducts Rule (DBP) – Failure to Routine Monitor Chloramine (Major), 3rd quarter of 2017.** We failed to take the required number of samples for Chloramine during the 3<sup>rd</sup> quarter of 2017. Some people who use water containing chloramine well more than the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramine well more than the MRDL could experience stomach discomfort. The Prairie View HOA is taking steps to correct this violation of the Disinfectants and Disinfection Byproduct Rule by returning to a normal testing routine.

### **Violation: Revised Total Coliform Rule (RTCR) – Failure to Routine Monitor**

**July 2017.** Our water system is required to sample for Total Coliform bacteria monthly. We failed to collect the required number of total coliform samples during the month of July 2017 and are therefore unsure of the quality of the water at that time. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Prairie View HOA is taking steps to correct this violation of the Revised Total Coliform Rule by returning to a routine testing schedule. Subsequent total Coliform samples have been satisfactory.

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.

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.

\*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. Prairie View HOA 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>.

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 2 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.

Unregulated contaminants are those for which 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 the Agency should consider regulating those contaminants in the future. Should you have any questions please contact Marie Pierce, Prairie View HOA @ (919) 240-4045.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary to address these improvements.

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 Mary Pierce @ (919) 240-4045 if you have questions.

Prairie View HOA 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.

