Jamestown Water Department

Annual Drinking Water Quality Report 2018

We're pleased to present to you the **2018 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 sources are wells drawing ground water from the Jamestown Aquifer underlying the James River Valley in McElroy park. We have a wellhead protection plan in place at the Water Treatment Plant that provides more information, such as, potential sources of contamination.

This report shows our water quality and what it means. This report is in the format and contains the required language as prescribed by EPA regulations. We want our valued customers to be informed about their water utility.

If you have questions about the report,

contact the City of Jamestown Water Department

Joe Rowell, Water Superintendent

joerowell@daktel.com 701-252-5131

If you have questions about your utility bill, contact City Hall at

utilitybill@jamestownnd.gov or 702-252-5900.

The Jamestown Water Department operates under the direction of the City Engineer, the City Administrator, and the Jamestown City Council. If you want to learn more, please attend any of our regularly scheduled council meetings. They are held on the first Monday monthly at 5:00 p.m. at City Hall.

Anyone who requires assistance accessing this report or meetings may contact **publicworks@jamestownnd.gov**.

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 the city's source water is moderately susceptible to potential contaminants.

The City of Jamestown Water Department asks large volume water customers to post copies of this 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 the water system.

The City of Jamestown Water Department routinely monitors for contaminants and minerals in your drinking water according to Federal and State laws. The Chemical Report Table shows the results of the monitoring for the period of January 1 to December 31, 2018. As authorized and approved by the EPA, the State of ND has reduced monitoring requirements for certain contaminants to less frequently than annually because the concentrations of these contaminants are not expected to change significantly. For example, the data for lead, arsenic and copper in the Chemical Report Table is more than one year old.

Drinking water, including tap and 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 through the EPA Safe Drinking Water Hotline at 800-426-4791 or at epa.gov/safewater/lead.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. 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. The U.S. Department of Health and Human Services 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 EPA Safe Drinking Water Hotline at 800-426-4791 or at epa.gov/safewater/lead.

While your drinking water meets the EPA's standard for arsenic, the water does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problem.

City water and your plumbing

If lead is present in drinking water, 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 Jamestown Water Department is responsible for providing high quality drinking water. The variety of materials used in indoor plumbing components can affect your drinking water quality.

TIP: Use water from the cold tap for drinking and cooking. When your water has been sitting in the system for several hours, you can help minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes prior to drinking it or cooking with it.

If you are concerned about lead in your drinking water, have your water tested. Information on lead testing methods, lead contamination, and steps you can take to minimize lead exposure is available from the EPA Safe Drinking Water Hotline at 800-426-4791 or at epa.gov/safewater/lead.

The City of Jamestown is proud to notify you that Jamestown's 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. See the *CCR Chemical Report Table*.

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.

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The Jamestown Water Department 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.

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:

Following are terms and abbreviations used in this report.

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.

Unregulated contaminants are contaminants for which the U.S. Environmental Protection Agency (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.

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 (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) - 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.

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

(MCL) Maximum Contaminate Level - The highest level of a contaminate that is allowed in drinking water. MCL's are set close to the MCLGs as feasible using the best available treatment technology.

(MRDL) Maximum Residual Disinfection Level - The highest level of 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 contaminate used to determine compliance with a National Primacy Drinking Water Regulation.

Range of Detection - The lowest to the highest result value recorded during the required monitoring timeframe for a system 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 - non 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

Chemical Report Table

City of Jamestown - ND4700498									
Lead/Copper									
	Date	**# of Samples**	**AL**	**90th Percentile**		**Samples Exceed AL**		**Units**	**Likely Source of Contamination**
Copper 90th Perc.	8/29/2017	33	1.3	0.0536		0		ppm	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead 90th Perc.	8/29/2017	33	15	7.91		1		ppb	Corrosion of household plumbing systems; Erosion of natural deposits.
		Date	**MCL**	**MCLG**	**High Comp.**		**Units**	**Range**	
Inorganic Contaminants									
Arsenic		3/9/2016	10	0	4.88		ppb	N/A	Erosion of natural deposits, runoff from orchards and glass & electronic production wastes.
Barium		4/11/2018	2	2	0.00319		ppm	N/A	Discharge from drilling wastes and metal refineries; Erosion of natural deposits.
Flouride		4/11/2018	4	4	0.752		ppm	N/A	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate-Nitrite		1/17/2018	10	10	0.06		ppm	N/A	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Radioactive Contaminants									
Gross Alpha, Including RA, Excluding									
RU&N		7/9/2018	15	15	1.57		pCi/l	N/A	Erosion of natural deposits.
Radium, Combined (226,228)		7/9/2018	5		0.689		pCi/l	N/A	Erosion of natural deposits.
Disinfectants									
Chloramine		9/30/2018	MDRL=4.0	MRDLG=4	1.6		ppm	1.22 to 2.58	Water additive to control microbes.
Chlorine		2/28/2018	MDRL=4.0	MRDLG=4	1.2		ppm	1.156 to 1.218	Water additive to control microbes.
Unregulated Contaminants									
Alkalinity, Carbonate		4/11/2018			5		ppm	N/A	
Alkalinity, Total		4/11/2018			77.5		ppm	N/A	
Bicarbonate as HCO3		4/11/2018			85		ppm	N/A	
Calcium		4/11/2018			27.9		ppm	N/A	
Chloride		4/11/2018			45.4		ppm	N/A	
Conductivity @ 25 C UMHOS/CM		4/11/2018			845		umho/cm	N/A	
Hardness, Total (AS CACO3)		4/11/2018			120		ppm	N/A	
Iron		4/11/2018			0.054		ppm	N/A	
Magnesium		4/11/2018			12.2		ppm	N/A	
PH		4/11/2018			8.6		PH	N/A	
Potassium		4/11/2018			7.9		ppm	N/A	
Sodium		4/11/2018			107		ppm	N/A	
Sodium Adsorption-Ratio		4/11/2018			4.25		obsvsn	N/A	
Sulfate		4/11/2018			245		ppm	244-245	
TDS		4/11/2018			493		ppm	N/A	
Zinc		4/11/2018			0.00194		ppm	N/A	
Stage 2 Disinfection Byproducts (TTHM/HAA5)									
	System/Site	**Date**	**MCL**	**MCLG**	**High Comp.**		**Units**	**Range**	
HAA5	System-Wide	3/31/2018	60		1		ppb	ND to 1.25	By-product of drinking water chlorination.
TTHM	System-Wide	12/31/2018	80		1		ppb	0.57 to 1.53	By-product of drinking water chlorination.
Bacteriological Monitoring Data - RTCR									
Total Coliform Data:	July had the highest number of Total Coliform Samples								
	Total Coliform positives for that month: 1								