

2020 WATER QUALITY REPORT FOR CITY OF SPIRIT LAKE AND CITY OF ORLEANS PWSID 3070078

This report contains important information regarding the water quality in our water system. The source of our water is surface water drawn from Big Spirit Lake. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
950 – DISTRIBUTION SYSTEM						
Copper (ppm)	AL=1.3 (1.3)	90th	0.02 (ND - 0.19)	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	1.0 (ND - 2.0)	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.7 (2.2 - 3.2)	2019	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	RAA	53 (40 - 71)	08/2019	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	RAA	22 (19 - 23)	05/2019	No	By-products of drinking water disinfection
TP01 - BIG SPIRIT LAKE/ 01 - FINISHED TAP @ PLANT						
Sodium (ppm)	N/A (N/A)	SGL	17	04/2019	No	Erosion of natural deposits; Added to water during treatment process
Asbestos	7 MFL (N/A)	SGL	<0.20	06/2019	No	Chemical found in piping
Turbidity (NTU)	N/A (N/A)	TT	0.34 99.64% met requirement	2019	No	Soil runoff, Organic material
Fluoride	4(4)	SGL	0.86 (0.60 - 0.86)	04/2019	No	Water additive which promotes strong teeth; Erosion of natural deposits
Total Organic Carbon (TOC)	N/A	TT	2.1 (1.1 - 3.3)	2019	No	Naturally present in the environment
Nitrate [as N] (ppm)	10 (10)	SGL	0.36	04/2019	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Manganese	MCL=0.3	SGL	<0.02	10/2019	No	Metals EPA 200.8
Antimony	MCL=0.006	SGL	<0.005	10/2019	No	Metals EPA 200.8

Notes: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

Total Organic Carbon Value and Range are based on the Removal Ratio Running Annual Average.

DEFINITIONS

- Maximum Contaminant Level (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 Contaminant Level Goal (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.
- ppb -- parts per billion.
- ppm -- parts per million.
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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.
- SGL – Single Sample Result
- NTU-Nephelometric Turbidity Unit

GENERAL INFORMATION

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 or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). We are currently testing for *Cryptosporidium* and E Coli in our raw water to determine if additional treatment is necessary.

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. Spirit Lake and Orleans are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 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>.

CONTAMINANT / OTHER VIOLATIONS

October 7, 2019, this system was issued a monitoring violation per Iowa Administrative Code 81.17. Corrective action was taken immediately to ensure proper data integrity. There are no health related concerns regarding this action.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin. When Zebra Mussels were first discovered in the Lakes Region, our utility was proactive and began treatment to protect our water infrastructure.

Surface Water Name	Susceptibility
Big Spirit Lake	high

SYSTEM SECURITY

Our water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, or fire hydrants, please contact us at the Spirit Lake Water Department at 712-336-2127 or the local police/sheriff department at 712-336-2525. We appreciate your assistance in protecting the water system.

CONTACT INFORMATION

For questions regarding this information, please contact Tom Orthel at 712-336-2127 during the hours of 7:00a.m. to 4:00p.m., Monday through Friday. Decisions regarding the water system are made at City Council meetings which are held on the second and fourth Tuesday of each month at 5:30p.m. at Spirit Lake City Hall and are open to the public. Please note: This report will not be mailed to individual customers.