

# 2016 WATER QUALITY REPORT FOR SIRWA- CRESTON DISTRIBUTION SYSTEM

This report contains important information regarding the water quality in our water system. The source of our water is surface water. All of the water is purchased. Purchased water comes from Creston Water Supply. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	52.00 (22 - 110)	12/31/2016	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	44.00 (22 - 99)	06/30/2016	No	By-products of drinking water disinfection
Copper (ppm)	AL=1.3 (1.3)	90th	0.53 (0.05 - 1.36) 1 sample(s) exceeded AL	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	13.00 (ND - 116) 3 sample(s) exceeded AL	2015	No	Corrosion of household plumbing systems; erosion of natural deposits
<b>950 - DISTRIBUTION SYSTEM</b>						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.21 (1.93 – 2.4)	12/31/2016	No	Water additive used to control microbes
E. coli	Routine and repeat samples are total coliform-positive and either is E. coli-positive, or system fails to take repeat samples following E. coli-positive routine sample, or system fails to analyze total coliform-positive repeat sample for e. coli. (N/A)	RTCR	1 sample(s) positive	08/31/2016	No	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.
Total Coliform Bacteria	TT (TT)	RTCR	1 sample(s) positive	08/31/2016	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water

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

## 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.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- LRAA – Locational 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
- TCR – Total Coliform Rule
- NTU – Nephelometric Turbidity Units
- SIRWA – Southern Iowa Rural Water Association

## 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 posed 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).

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. SIRWA is 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>.

**ADDITIONAL HEALTH INFORMATION**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

**SOURCE WATER ASSESSMENT INFORMATION**

This water supply obtains some or all of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

Original Supply ID	Original Supply Name
IA8816089	Creston Water Supply

**OTHER INFORMATION**

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

**CONTACT INFORMATION**

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact Matt Schultz, SIRWA's Operations Manager at 641-782-5744.

**PURCHASED WATER INFORMATION**

Our water system purchases water from the City of Creston. Their water quality is as follows on the next page:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Lead (ppb)	AL=15 (0)	90th	12.00 (ND - 17) 1 sample Exceeded AL	2016	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.37 (ND - 0.72)	2016	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine and Chloramines (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.0 (1 – 3.8)	12/31/2016	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	39.00 (17 – 69)	06/30/2016	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	24.00 (15 – 35)	06/30/2016	No	By-products of drinking water disinfection
Chlorite (ppm)	1.0 (0.8)	SGL	(ND – 0.32)	12/31/2016	No	Byproduct of drinking water disinfection
01 - TWELVE MILE LAKE @ WATER PLANT						
Sodium (ppm)	N/A (N/A)	SGL	7	2/09/2016	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1.8	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Dalapon (ppb)	200 (200)	SGL	0.70	04/21/2015	No	Runoff from herbicide used on rights of way
02 - THREE MILE LAKE AFTR TRTMT @ WTR PLT						
Fluoride (ppm)	4 (4)	SGL	0.79	06/10/2013	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.09	06/10/2013	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	6.0	08/09/2016	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1.8	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Picloram (ppb)	500 (500)	SGL	0.80	05/24/2016	No	Herbicide runoff
Dalapon (ppb)	200 (200)	SGL	0.50	05/24/2016	No	Runoff from herbicide used on rights of way
p-Dichlorobenzene	75 (75)	SGL	0.50	5/24/16	No	Discharge from industrial chemical factories
Fluoride (ppm)	4 (4)	RAA	0.50 -0.85 Average = 0.80	2016	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Turbidity (NTU)	0.30 NTU (N/A)	TT	0.04 -0.109 Highest Single Reading: 0.109 NTU Average = 0.076	2016	No	Soil runoff
Total Organic Carbon (TOC)	Greater than or equal to 1.00	RAA	1.30	2016	No	Naturally Present in the Environment