

2018 WATER QUALITY REPORT

FOR

SIRWA – CORNING 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 Corning Municipal Water Department. 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	56.00 (38 - 82)	12/31/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	42.00 (22 - 76)	3/31/2018	No	By-products of drinking water disinfection
Copper (ppm)	AL=1.3 (1.3)	90th	0.61 (ND - 0.78)	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	4.00 (ND - 9)	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.66 (2.04 – 2.93)	12/31/2018	No	Water additive used to control microbes
Nitrate [as N] (ppm)	10 (10)	SGL	0.5 (ND – 0.5)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [as N] (ppm)	1 (10)	SGL	0.4 (ND – 0.4)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

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
- 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
- RTCR – Revised 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>.

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
IA0220075	Corning Municipal Utilities

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 Operation Manager at 641-782-5744.

PURCHASED WATER INFORMATION

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

Lead (ppb)	AL=15 (0)	90th	3.90 (ND-5)	2017	NO	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.241 (0.0244 – 0.243)	2017	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
E.coli (before treatment)	100 cfu/100ml	N/A	7.8 average (0-68)	Oct17-Sep2018	No	Part of the LT2 Enhanced Surface Water Treatment Rule.
950 Distribution System						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.0 (2.7-3.1)	3/31/2018	NO	Water additive used to control microbes
Chlorite	1.0 –(0.8)	SGL	(ND-0.730)	12/31/2018	NO	By-product of drinking water disinfection
Total Trihalomethane (TTHM) (ppb)	80 (N/A)	LRAA	55.00 (43-71)	12/31/2018	NO	By-products of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60 (N/A)	LRAA	31.00 (21-36)	12/31/2018	NO	By-products of drinking water disinfection
Fluoride (ppm)	4.0 (4.0)	SGL	0.53 (.400-0.500)	3/31/2018	NO	Water additive, promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Total Coliform Bacteria	TT (TT)	RTCR	ND	01/01/2018 to 12/31/2018	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.
02- Lake Icaria,	Binder, Reservoir	@	Water Plant			
Total Organic Carbon (TOC) (ppm)	N/A (N/A)	TT	Avg. Removed 38.54%	12/31/2018	NO	Naturally present in the environment
Fluoride (ppm)	4.0 (4.0)	SGL	1.02 (0.46-1.02)	02/27/2018	NO	Water additive, promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 - (2)	SGL	.0707	01/15/2013	NO	Discharge of drilling wastes, metal refineries, erosion of natural deposits
Gross Alpha Inc, (pCi/L)	15 (0)	SGL	1.4	04/17/2012	NO	Erosion from natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	<1.0	04/10/2018	NO	Erosion from natural deposits
Sodium (ppm)	N/A (N/A)	SGL	12.7	01/23/2018	NO	Erosion of natural deposits; Added to water during treatment process
Turbidity (NTU)	N/A (N/A)	TT	0.18 (100%) 11/18/18	01/01/2018 - 12/31/2018	NO	Soil runoff
Nitrate (as N) (ppm)	10 (10)	SGL	<0.1	04/10/2018	NO	Runoff from fertilizer, leaching from Septic Tanks, Erosion of natural deposits

2018 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	64.00 (41 - 100)	03/31/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	44.00 (22 - 84)	03/31/2018	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	3.00 (ND - 5)	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.83 (ND - 1.7) 2 samples exceeded AL	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.17 (2.00 – 2.32)	12/31/2018	No	Water additive used to control microbes
Total Coliform Bacteria	TT (TT)	RTCR	2 samples positive	07/31/2018	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.
Nitrate [as N] (ppm)	10 (10)	SGL	0.68 (ND – 0..58)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [as N] (ppm)	1 (10)	SGL	0.1 (ND – 0.1)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

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:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM] (DB01)	80 (N/A)	LRAA	45.00 (33-59)	03/31/2018	No	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] (DB02)	80 (N/A)	LRAA	45.00 (31-58)	03/31/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] (DB01)	60 (N/A)	LRAA	31.00 (24-47)	03/31/2018	No	By-products of drinking water chlorination
Lead (ppb)	AL=15 (0)	90th	12.00 (ND - 17) 1 sample(s) 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 (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.0 (2-3.7)	06/30/2018	No	Water additive used to control microbes
Chlorite (ppm)	1.0 (0.8)	SGL	(ND-0.4)	12/31/2018	No	Byproduct of drinking water disinfection
01 - TWELVE MILE LAKE @ WATER PLANT						
Sodium (ppm)	N/A (N/A)	SGL	8	01/22/2018	No	Erosion of natural deposits; Added to water during treatment process
Dalapon (ppb)	200 (200)	SGL	0.50	02/05/2018	No	Runoff from herbicide used on rights of way
02 - THREE MILE LAKE AFTR TRTMT @ WTR PLT						
Barium (ppm)	2 (2)	SGL	0.09	06/10/2013	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	1.36 (0.53-1.36)	06/11/2018	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	7.9	06/25/2018	No	Erosion of natural deposits; Added to water during treatment process
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 (ppb)	75 (75)	SGL	0.50	05/24/2016	No	Discharge from industrial chemical factories
Turbidity (NTU)	N/A (N/A)	TT	0.319 (100%)	2018	No	Soil runoff
			Range 0.02 – 0.32 Average 0.039			
Total Organic Carbon (TOC)	N/A (N/A)	TT	43% – 87%	07/28/2018	No	Naturally present in the Environment

2018 WATER QUALITY REPORT FOR SIRWA – GREENFIELD 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 Greenfield Municipal Utilities. 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	65.00 (45 - 89)	06/30/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	53.00 (43 - 72)	06/30/2018	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	10.00 (ND - 14)	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.39 (ND - 0.52)	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.03 (1.47 – 2.34)	12/31/2018	No	Water additive used to control microbes
Total Coliform Bacteria	TT (TT)	RTCR	1 sample positive	10/31/2018	No	Coliforms are bacteria that are naturally present in the environment and 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>.

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
IA0140007	Greenfield Municipal Utilities

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 Greenfield. Their water quality is as follows on the next page:

CONTAMINANT	MCL-(MCLG)	COMPLIANCE		DATE	VIOLATION	SOURCE
		Type	Value & Range		Yes/No	
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	57.00 (31 - 94)	03/31/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [NAA5]	60 (N/A)	LRAA	38.00 (19 - 42)	06/30/2018	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	3.00 (ND - 3)	2017	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.37 (ND - 0.67)	2017	No	Corrosion of household plumbing systems; Erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.79 (1.35 - 1.79)	11/30/2018	No	Water additive used to control microbes
01 - GREENFIELD LAKE & WELLS 1-6						
Sodium (ppm)	N/A (N/A)	SGL	9.1	04/02/2018	No	Erosion of natural deposits; Added to water during treatment process
Fluoride (ppm)	4 (4)	SGL	0.80 (0.35 - 0.80)	2018	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Dalapon (ppb)	200 (200)	SGL	0.90	11/30/2015	No	Runoff from herbicide used on ROW
Nitrate [as N] (ppm)	10 (10)	SGL	1.0	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon (TOC)	N/A	TT	30.00 (30.00 - 46.94) % removed	2018 Monthly	No	Naturally present in the environment
Turbidity (NTU)	N/A (N/A)	TT	2.498 99.92% of Samples Meet Requirements	2018	Yes	Soil runoff

2018 WATER QUALITY REPORT FOR SIRWA – LEON 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 Leon 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 (43 - 62)	03/31/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	39.00 (13 - 68)	12/31/2018	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	ND	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.28 (ND - 0.41)	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.86 (1.74 - 2.03)	12/31/2018	No	Water additive used to control microbes

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DEFINITIONS

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- 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.
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- SGL – Single Sample Result
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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>.

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
IA2742076	Leon 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 Operation Manager at 641-782-5744.

PURCHASED WATER INFORMATION

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

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Copper (ppm)	AL=1.3 (1.3)	90 th	0.07 (0.01 - 0.08)	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90 th	5.00 (ND - 37) 1 sample(s) exceeded AL	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.46 (1.12 – 1.73)	6/30/2018	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM] – DB01	80 (N/A)	LRAA	74.3 (46 - 76)	2018	No	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] – DB02	80 (N/A)	LRAA	62.8 (59 - 72)	2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] – DB01	60 (N/A)	LRAA	46.3 (21 - 53)	2018	No	By-products of drinking water disinfection
Total Haloacetic Acids (ppb) [HAA5] – DB02	60 (N/A)	LRAA	45.0 (19 - 58)	2018	No	By-products of drinking water disinfection
01 - FRM LITTLE RIVER AFTR TRMNT						
Fluoride (ppm)	4 (4)	SGL	0.89 (0.68 - 0.89)	10/1/2018	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	24	9/4/2018	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	ND	1/8/2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	ND	8/7/2018	No	Runoff from herbicide used on row crops
Dalapon (ppb)	200 (200)	SGL	0.8	4/2/2018	No	Runoff from herbicide used on rights of way
Turbidity (NTU)	N/A (N/A)	TT	3.33 89.9% of samples met the requirements	7/20/2018	Yes	Soil runoff
Total Organic Carbon (TOC) (ppm)	N/A	TT	1.38 (1.21 - 2.09)	12/2018	No	Naturally present in the environment

2018 WATER QUALITY REPORT FOR SIRWA – OSCEOLA 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 Osceola Water Works. 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	41.00 (22 - 86)	3/31/2018	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	38.00 (16 - 72)	3/31/2018	No	By-products of drinking water disinfection
Copper (ppm)	AL=1.3 (1.3)	90th	0.56 (0.09 – 1.0)	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	ND	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.16 (1.91 – 2.36)	12/31/2018	No	Water additive used to control microbes
Total Coliform Bacteria	TT (TT)	RTCR	1 sample positive	2/28/2018	No	Coliforms are bacteria that are naturally present in the environment and 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>.

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
IA2038038	Osceola Water Works

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 Osceola. Their water quality is as follows on the next page:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	33.00 (22 - 44)	4/5/18	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	34.00 (24 - 59)	4/5/18	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	.004 (ND – .011)	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.38 (0.02 - 0.42)	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.2 (2.5 - 3.6)	03/31/2018	No	Water additive used to control microbes
01 - S/EP FROM WEST LAKE						
Fluoride (ppm)	4 (4)	SGL	0.6 (.48 - .90)	10/15/2018	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.06	07/08/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	28	07/10/2018	No	Erosion of natural deposits; Added to water during treatment process
Atrazine (ppb)	3 (3)	SGL	0.70	02/05/2018	No	Runoff from herbicide used on row crops
Total Organic Carbon TOC ppm	NA	TT	1.3 (.95 – 2.34)	5/30/18	No	Naturally present in the environment
Turbidity (NTU)	N/A (N/A)	TT	2.03	3/2/18	Yes	Soil runoff