

2016 WATER QUALITY REPORT

LEON WATER SUPPLY

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

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
Copper (ppm)	AL=1.3 (1.3)	90 th	0.03 (ND - 0.04)	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90 th	7.00 (ND - 33) 1 sample(s) exceeded AL	2015	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.47 (0.76 – 1.86)	3/31/2016	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM] – DB01	80 (N/A)	LRAA	85.00 (60 - 110)	8/5/2016	Yes	By-products of drinking water chlorination
Total Trihalomethanes (ppb) [TTHM] – DB02	80 (N/A)	LRAA	71.25 (44 - 92)	2016	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5] – DB01	60 (N/A)	LRAA	63.75 (47 - 74)	9/16/2016	Yes	By-products of drinking water disinfection
Total Haloacetic Acids (ppb) [HAA5] – DB02	60 (N/A)	LRAA	55.00 (43 - 63)	2016	No	By-products of drinking water disinfection
01 - FRM LITTLE RIVER AFTR TRMNT						
Fluoride (ppm)	4 (4)	SGL	0.82 (0.61 - 0.82)	9/2016	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Arsenic (ppb)	10 (0)	SGL	1.00	8/1/2012	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Sodium (ppm)	N/A (N/A)	SGL	25	7/11/2016	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	ND	2/1/2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3 (3)	SGL	0.10	7/5/2016	No	Runoff from herbicide used on row crops
Dalapon (ppb)	200 (200)	SGL	1.30	4/4/2016	No	Runoff from herbicide used on rights of way
Turbidity (NTU)	N/A (N/A)	TT	0.225 100% of samples met the requirements	9/19/2016	No	Soil runoff
Total Organic Carbon (TOC) (ppm)	N/A	TT	1.28 (1.04 - 1.51)	12/2016	No	Naturally present in the environment

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

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. LEON WATER SUPPLY 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>.

CONTAMINANT VIOLATIONS

Violation Type	Contaminant	Begin Date	End Date
Our water system violated a drinking water standard for Total Haloacetic Acids (HAA5). Some people who drink water containing haloacetic acids in excess of the MCL over many years have an increased risk of getting cancer.			
MCL (Chem-Rad), Average	Total Haloacetic Acids (HAA5)	04/01/2016	06/30/2016
MCL (Chem-Rad), Average	Total Haloacetic Acids (HAA5)	07/01/2016	09/30/2016
Our water system violated a drinking water standard for Total Trihalomethanes (TTHM). Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
MCL (Chem-Rad), Average	Total Trihalomethanes (TTHM)	07/01/2016	09/30/2016
MCL (Chem-Rad), Average	Total Trihalomethanes (TTHM)	10/01/2016	12/31/2016

In May and August 2016 Leon Water Supply exceeded the Maximum Contaminate Level (MCL) for Total Haloacetic Acids (HAA5) at one of our sample sites. In August and November 2016 Leon Water Supply exceeded the Maximum Contaminate Level (MCL) for Total Trihalomethanes (TTHM) at one of our sample sites.

Leon Water Supply has been working closely with Iowa Department of Natural Resources, Iowa Rural Water Association, ISG Engineering, and Chem-Sult to implement treatment strategies that will reduce the formation of HAA5 and TTHM. We have made changes to the treatment chemical dosages and implemented a storage plan to reduce water age.

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 water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
Little River Reservoir	high

OTHER INFORMATION

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

CONTACT INFORMATION

For questions regarding this information, please contact city hall at 641/446-6221 during the following hours: 8:00 a.m. – 4:30 p.m. or Kyle Sheetz 641/446-6344 at the water plant between 7:00 a.m. – 3:30 p.m.

Decisions regarding the water system are made at the city council meetings held on the 3rd Thursday of the month at 7:00 p.m. at city hall and are open to the public.

Please note: This report will not be mailed to each customer.