

# CITY OF LAKE ALFRED

## 2021 ANNUAL DRINKING WATER QUALITY REPORT

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services 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 source is four wells that draw water from the Floridan aquifer. It is then treated at our two water treatment facilities. Our treatment process includes aeration to remove contaminants, chlorination for disinfection, and fluoridation for dental health.

This report shows our water quality results and what they mean.

If you have any questions about this report or concerning your water utility, or want to obtain a copy of this report, please contact John Deaton at (863) 291-5270. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Monday of the month at 7:30 p.m. at Lake Alfred City Hall.

The City of Lake Alfred routinely monitors for contaminants in your drinking water according to Federal and State laws, rules and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2021. Data obtained before January 1, 2021 and presented in this report are from the most recent testing done in accordance with regulations authorized by the state and approved by the United States Environmental Protection Agency (EPA).

As water travels over the land or underground it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water (both tap water 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants that may be present in source water include:

**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 storm water 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 storm water 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 storm water runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring, or be the result of oil and gas production or mining activities.

In the data table you will find many terms you might not be familiar with. To help you better understand these terms we've provided the following key to these terms' abbreviations and definitions:

TERMS Appearing in TABLE		DEFINITION
Action Level	AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
Not Applicable	N/A	Does not apply
Not-Detected	ND	Means not detected and indicates that the substance was not found by laboratory analysis.
Parts per million	ppm	One part by weight of analyte to one million parts by weight of the water sample.
Parts per billion	ppb	One part by weight of analyte to one billion parts by weight of the water sample.
Picocuries per liter	pCi/L	- <i>picocuries per liter</i> is a measure of the radioactivity in water
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. <b>Maximum Contaminant Levels (MCL)</b> are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the <b>MCL</b> level for a lifetime to have a one-in-a-million chance of having the described health effect.
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.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791

### TEST TABLE RESULTS

\*\* Results in the Level Detected column for Radiological and Inorganic contaminants, are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

\*\*\* Results regarding Alpha emitters, Radium 226, and Radium 228 were taken in February 2021 due to our failure to collect samples during the standard collection period for 2021.

Contaminant and Unit of Measurement	Dates of sampling (MO. / YR.)	MCL Violation YES / NO	Level Detected **	MCLG	MCL	Likely Source of Contamination
<b>Radiological Contaminants</b>						
Alpha emitters (pCi/l) ***	2/13/21-2/17/21	N	7.0	0	15	Erosion of natural deposits.
Radium 226, Radium 228 or combined Radium (pCi/l) ***	2/13/21-2/17/21	N	0.6	0	5	Erosion of natural deposits.

## Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	1/1/20-12/31/21	N	1.3	1.1 – 1.3	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium (ppm)	1/1/21-12/31/21	N	0.02	0.02	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Sodium (ppm)	1/1/21-12/31/21	N	16.9	16.4 - 16.9	N/A	160	Salt water intrusion, leaching from soil.
Fluoride (ppm)	1/1/21-12/31/21	N	0.52	0.26 - 0.52	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Nickel (ppb)	1/1/21-12/31/21	N	1.8	1.4 – 1.8	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.

## Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Parameters

Contaminant and Unit of Measurement	Dates of Sampling MO/YR	MCL Violation YES / NO	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine: Level Detected is the annual average of the 2021 monthly averages; Range of Results is the range of results (lowest to highest) at the individual sampling sites. Haloacetic Acids (MCL 60 ppb), and TTHM (MCL 80 ppb) are single samples.							
Chlorine (ppm)	1/1/21-12/31/21	N	2.5	1.0 – 2.5	MRDLG = 4.0	MRDL = 4.0	Water additive used to control microbes.
HAA5 (Haloacetic Acid) (ppb)	1/1/21-12/31/21	N	50.9	43.5 - 50.9	NA	MCL = 60	By-product of drinking water disinfection.
TTHM [Total Trihalomethanes] (ppb)	1/1/21-12/31/21	N	47.6	39.0 - 47.6	NA	MCL = 80	By-product of drinking water disinfection.

## Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (MO. / YR.)	AL Violation YES / NO	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	8/21	N	0.20	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	8/21	N	1.3	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits.

Disinfection by-products – Haloacetic acids (five): Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

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 (1-800-426-4791).

Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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. City of Lake Alfred 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>.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Please call John Deaton at (863) 291-5270 if you have questions.