ANNUAL DRINKING WATER QUALITY REPORT 2021

City of Lake Mary

Lake Mary Public Works is pleased to present you with the 2021 Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services that we deliver to you every day. The water quality results on these reports shows the commitment and teamwork of our certified water operators. Our constant goal is to provide you with a clean and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment processes and the distribution system to protect our water resources. We are proud to share this report, which is based on water quality testing through December 2021. You will find that we supply water that meets or exceeds all Federal and State Water Quality Regulations.

Introduction

The City of Lake Mary's water supply comes from six groundwater wells that draw water from the upper Floridan Aquifer. All groundwater wells supply water to our single Water Treatment Plant (WTP), which was named in honor of former Commissioner Harry Terry who actively encouraged our City to build its own facility. The well water is treated at the WTP with an Ultraviolet Light Advanced Oxidation Process (UVAOP) with the use of hydrogen peroxide, granulated activated carbon, fluoridation, and chlorination before it is pumped into the distribution water mains that bring water to your home. This year we treated and distributed more than 1.242 billion gallons, which averages to 3.403 million gallons daily. The City has four water main interconnections with Seminole County and one with the City of Sanford. These interconnects are available for use during fire emergencies and system repairs.

Our drinking water meets all Federal and State requirements. If you have any questions about this report or concerns with your water utility, please contact the Director of Public Works at 407-585-1452 between the hours of 8:00 am and 5:00 pm, Monday through Friday. In case of any water-related emergency after hours, such as a line or service break, please contact the Seminole County Sheriff non-emergency at 407-665-6650. We encourage our valued customers to be informed about their water utility. If you want to learn more, you are invited to attend and participate in any water utility discussions held during City Commission meetings on the 1st and 3rd Thursday of each month.

The City of Lake Mary 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 – December 31, 2021. Data obtained before January 1, 2021, and presented in this report, are from the most recent testing done in accordance with the laws, rules, and regulations.

Source Water Assessment Plan
In 2021 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. The assessment indicated that there are five potential contamination sources with low susceptibility. The assessment results are available on the FDEP SWAPP website at https://fldep.dep.state.fl.us/swapp/ or they can be obtained from Public Works at 407-585-1452.

EPA Would Like You to Know
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.

Contaminants that may be present in source water include:

A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

B. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

D. 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 stormwater runoff, and septic systems.

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

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the number of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the water poses a health risk. 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.

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.

Terms and Abbreviations

- **Maximum Contaminant Level or 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 or 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.
- **Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Maximum Residual Disinfectant Level or MRDL**: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal or 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.
- "**ND**" means not detected and indicates that the substance was not found by laboratory analysis.
- **Parts per million (ppm) or Milligrams per liter (mg/L)** – one part by weight of analytic to 1 million parts by weight of the water sample.
- **Parts per billion (ppb) or Micrograms per liter (µg/L)** – one part by weight of analytic to 1 billion parts by weight of the water sample.
- **Picocurie per liter (pCi/L)** - the measure of radioactivity in water.

Water Quality Results

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
Barium (ppm)	05/20	N	0.0089	0.0089	2.0	2.0	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	05/20	N	0.56	0.56	4.0	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm
Nitrate (as Nitrogen) (ppm)	03/21	N	0.23	0.23	10.0	10.0	Runoff from fertilizer use; leaching from septic tank, sewage; erosion of natural deposits
Sodium (ppm)	05/20	N	8.1	8.1	N/A	160	Saltwater intrusion, leaching from soil

Stage 1 Disinfectant/Disinfection By-Product

For bromate, chloramines, or chloride, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all individual samples collected during the past year.

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	01/21 – 12/21	N	1.17	0.48 – 1.93	4.0	4.0	Water additive used to control microbes

Stage 2 Disinfectant/Disinfection By-Product

For Haloacetic Acids (HAA5) or Total Trihalomethanes (TTHM), the level detected is the locational running annual average (LRAA). Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (HAA5), ppb	01/21 – 12/21	N	17.625 LRAA: L4 for 2-QRT	0.0 – 19.4	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM), ppb	01/21 – 12/21	N	58.975 LRAA: L3 for 2-QRT	3.3 – 61.8	N/A	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 (Y/N)	90th Percentile Result	Number of Sampling Sites Exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	11/21	N	0.43	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	11/21	N	1.3	0	0.0	15	Corrosion of household plumbing systems; erosion of natural deposits

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. The City of Lake Mary 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: 1-800-426-4791 or https://www.epa.gov/ground-water-and-drinking-water

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.

The City of Lake Mary would like 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. If you have any questions or concerns about the information provided, please call 407-585-1452.

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