2023 Water Quality Report

Water system ID# 2610203

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información

Ensuring your water is safe to drink

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your drinking water comes from, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to providing you with information because informed customers are our best allies. In addition, we want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. For more information contact Jerald Lee at (386)-362-2276 or water dept. at (386)-590-2453.

Drinking Water Sources

Our water is groundwater pumped by 2 wells from the Floridan Aquifer that are owned by the City of Live Oak and maintained by Jacobs. All water is treated with sodium hypochlorite for disinfection, fluoride for strong teeth, and a poly-orthophosphate blend for the sequestering of iron. Once treated, the water is then pumped into the distribution system to refill the water towers.

FDEP Source Water Assessment

In 2023, 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. There is one potential source of contamination identified with a low susceptibility level in the vicinity of our wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at https://prodapps.dep.state.fl.us/swapp/

Public Participation Opportunities

We encourage our valued customers to be informed about their water utility. If you would like more information on public participation opportunities please call Jerald Lee, at (386)-362-2276. You can learn more about plans for the City's drinking water system by attending monthly council meetings. For information on meeting dates call (386)-362-2276 or on the web at www.cityofliveoak.org

Special Population Advisory

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 contaminates are available from the Safe Drinking Water Hotline (800)-426-4791.

Contaminants in Water

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 poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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:

- 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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.
- 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 amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Lead Specific Information

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 Live Oak Water Treatment Facility 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 (800)-426-4791 or at www.epa.gov/safewater/lead.

Water Quality Data

The table in this report lists all the drinking water contaminants that were detected during the 2023 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2023. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Table of Detected Contaminants

Radioactive 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**
Alpha emitters (pCi/L)	4/2023	N	3.44	NA	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	4/2023	N	0.77	NA	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**
Barium (ppm)	4/2023	N	0.009	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	4/2023	N	1.6	NA	100	100	Erosion of natural deposits; discharge from industrial factories.
Cyanide (ppb)	4/2023	N	8.3	NA	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Fluoride (ppm)	4/2023	N	0.75	NA	4	4	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
Sodium (ppm)	4/2023	N	5.1	NA	N/A	160	Saltwater intrusion, leaching from soil
Synthetic organic contaminants including pesticides and herbicides							
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**
Di (2-ethylhexyl) phthalate (ppb)	4/2023	N	5.3	NA	0	6	Discharge from rubber and chemical factories
Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	**Dates of sampling (mo./yr.)**	**MCL, MRDL Violation Y/N**	**Level Detected**	**Range of Results**	**MRDLG**	**MRDL**	**Likely Source of Contamination**
Chlorine (ppm)	1/2023-12/2023	N	1.1	0.4 - 1.7	4	4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	8/2023	N	10	8 - 10	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	8/2023	N	25.6	20 – 25.6	NA	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	**Date of sampling (mo./yr.)**	**AL Exceeded (Y/N)**	**90th Percentile Result**	**No. of sampling sites exceeding AL**	**MCLG**	**AL (Action Level)**	**Likely Source of Contamination**
Copper (tap water) (ppm)	8/2023	N	0.5	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (tap water) (ppb)	8/2023	N	4.8	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Monitoring and Reporting of Compliance Data Violations

Due to administrative oversight during a busy part of the year, the water system failed to either submit a waiver request or conduct a second round of sampling for synthetic organic contaminant monitoring which is required by the EPA's Safe Drinking Water Act. This violation has no impact on the quality of the water our customers received as the first round of sampling had no results greater than the MCL, and it posed no risk to public health. We do take this issue seriously and have set up to sample for synthetic organic contaminants in the 1st quarter of 2024. We will also begin reviewing the compliance monitoring schedule routinely and are providing training to staff on a sample tracking tool to ensure monitoring requirements are met in the future.

We want to inform you about a recent lapse in our monitoring program due administrative oversight and increased workload, the water system failed to begin increased monitoring for the synthetic organic contaminant Di (2-ethylhexal) phthalate (DEHP) after initial results showed a detection of 5.3 ppb for this contaminant in April, 2023. F.A.C. 62-550.516 requires water systems to begin quarterly monitoring for any synthetic organic contaminant that is found above the detection limit of greater than 0.5 ppb. Though this contaminant was below the MCL of 6 ppb, due to the missed sampling we cannot ensure the levels for the remainder of the calendar year. Some people who drink water containing di (2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer. We take this issue seriously and have implemented corrective actions: Immediate quarterly monitoring of DEHP starting 1st quarter of 2024, comprehensive review of our compliance monitoring schedule to prevent future lapses, and staff training on sample tracking tool to ensure consistent monitoring adherence.

We are committed to providing safe and reliable drinking water and will continue to monitor DEHP levels closely.

Important Drinking Water Definitions	
Terms	**Definitions**
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
pCi/L	Picocuries per liter (a measure of radioactivity)
ppb	parts per billion, or micrograms per liter (µg/L)
ppm	parts per million, or milligrams per liter (mg/L)
MCL	Maximum Contaminant Level: 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.
MCLG	Maximum Contaminant Level Goal: 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.
MRDL	Maximum residual disinfectant level. 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.
MRDLG	Maximum residual disinfection level goal. 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.
NA	Not Applicable
ND	Not Detected
RAA	Running Annual Average – The level detected is the highest running annual average, computed quarterly, of monthly averages of all samples collected.