

2023 Water Quality Report Santee Water System System # 3810011

We're pleased to provide you with this year's Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water. The source of our water is purchased surface water.

A Source Water Assessment Plan has been prepared for our system. Santee Water System purchases water from Lake Marion Regional Water System. If you have any questions about this report or concerning your water utility, please contact Herman Keller at (803)-854-2152. We want you, our neighbors and valued customers, to be informed about your water utility. Feel free to attend any of our regularly scheduled meetings on the first Wednesday of every month at 6:00 pm at Santee Town Hall.

This report shows our water quality and what it means. The Santee Water System routinely monitors constituents in your drinking water according to Federal and State laws. As water travels over the land or underground, it can pick up substances or contaminants such as microbes and chemicals. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

The table below shows the results of our monitoring for the period of January 1st to December 31st, 2023. In this table you will find the following terms and abbreviations:

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or **Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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. MCL's 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 MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is 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.

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.

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.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Running Annual Average (RAA)

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LEAD AND COPPER TEST RESULTS

Contaminant	Violation Y/N	90 th percentile	Unit Measurement	MCLG	Action Level	Sites over action level	Likely Source of Contamination
Copper 2021	N	0.207	ppm	1.3	1.3	0	Erosion of natural deposits; Leaching from wood preservation; Corrosion of household plumbing systems
Lead 2021	N	1.2	ppb	0	15	0	Erosion of natural deposits; Leaching from wood preservation; Corrosion of household plumbing systems

REGULATED CONTAMINANTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Quarterly Average	Range of Levels Detected	MCLG	MCL	Units	Violation (Y/N)	Likely Source of Contamination
Chlorine	2023	2.0	2.0 – 2.0	MRDLG 4	MRDL 4	ppm	N	Water additive used to control microbes

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Disinfectants and Disinfection By-Products	Violation Y/N	Highest LRAA	Range of Levels Detected	MCLG	MCL	Units	Likely source of contamination
Haloacetic Acids (HAA5) 2023	N	4.0	0 – 8.4197	No goal for the total	60	ppb	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) 2023	N	1.0	1.2 – 1.6392	No goal for the total	80	ppb	By-product of drinking water disinfection

Lake Marion Regional Water System SC3820003

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation Y/N	Likely Source of Contamination
Nitrate (measured at Nitrogen)	2023	0.37	0.37 - 0.37	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive monthly Sample	1.000		0	N	Naturally present in the environment

Monitoring Period of Jan 1 - Dec 31, 2023

Constituent (units)	MCLG	MCL	Highest Level Detected	Range of Detections	Violation Yes/No	Source of Constituent
Total Coliform Bacteria (P/A)	0	5%			No	Naturally Present in the Environment
Fecal Coliform and E. Coli (P/A)	0	0			No	Human and Animal Fecal Waste
* Turbidity (NTU)	0.3	TT ≤ 1 NTU	0.07	0.07	No	Soil Runoff
		% ≤ 0.3 NTU	100%			
* Nitrate (measured as nitrogen) (ppm)	10	10	0.37	0.37	No	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion on natural deposits.
* Sodium (ppm)	N/A	N/A	14	14	No	Naturally Present in the Environment
TTHM (Total Trihalomethanes) (ppb)	None	80	RAA =		No	By-product of Drinking Water Disinfection
HAA5 (Haloacetic Acid 5) (ppb)	None	60	RAA =		No	By-product of Drinking Water Disinfection
* TOC (Total Organic Carbon) (ppm)	N/A	TT	N/A ^a	1.8 - 2.4	No	Naturally Present in the Environment
Lead (ppb)	0	AL = 15	90th% = 0 > AL		No	Corrosion of household plumbing. Erosion of natural deposits.
Copper, Free (ppm)	1.3	AL = 1.3	90th% = 0 > AL		No	Corrosion of household plumbing. Erosion of natural deposits.
Constituent (units)	MRDLG	MRDL	Highest Level Detected	Range of Detections	Violation Yes/No	Source of Constituent
*Chloramines (ppm)	4	4	3.17 ^b	3.07 - 3.17	No	Water additive used to control microbes
Chlorine (ppm)	4	4			No	Water additive used to control microbes

* Sampling location is Santee Cooper Lake Marion Regional Water System's Treatment Facility

^a Running Annual Average Removal Ratio for TOC is 1.17. Treatment Technique requires RAA Removal Ratio to be > 1.0

^b Highest Quarterly Average

General Interest
Monitoring Period of Jan 1 - Dec 31, 2023

Constituent (unit)	MCL	Average Level Detected
Alkalinity (ppm)	No Standard	23
Total Hardness (ppm)	No Standard	19
Conductivity (umhos/cm)	No Standard	151.9
Temperature (C)	No Standard	20.5
pH (SU)	6.5 to 8.5	7.80
Total Dissolved Solids (ppm)	500	77.5

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All sources of drinking water are subject to potential contamination by substances that are naturally occurring, or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 1-800-4264791.

If you have special health needs—

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).

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 Santee Water System 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 drinking 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>.

Did You Know?

- ❏ Tap water is the best value for your money. A 16 ounce of bottled water cost about \$1.50, whereas 1000 gallons of tap water cost about \$2.00.
- ❏ The water we have today is all the water there will ever be.
- ❏ Drinking water in the Unites States is among the safest in the world.
- ❏ You can refill an 8-ounce glass of water 15,000 times for the same cost as a 6 pack of soda. And, water has no sugar or caffeine.
- ❏ The average family turns on the tap between 70 and 100 times per day.
- ❏ Americans drink more than 1 billion glasses of water per day.

Santee Cooper Lake Marion system monitored the source water for *Cryptosporidium* in 2023. Samples were collected twice per month for a total of 24 samples. Two (2) of the twenty-four (24) samples were found to contain a single (1) *Cryptosporidium* Oocyst each for an average of 0.1909/liter of source water.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.