
ANNUAL DRINKING WATER QUALITY REPORT

January – December 2019

- GENERAL INFORMATION -

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 storm water 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 storm water 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 storm water runoff, and septic systems. **(E) Radioactive contaminants** which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount 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 at 1-800-426-4791.** ❖

Clay County Utility Authority
3176 Old Jennings Rd.
Middleburg, Florida 32068
904-272-5999



Landlords: Please post report in central location for all tenants/occupants to see.

2019 Annual Drinking Water Quality Report



Clay County Utility Authority

Working Together to Protect Public Health, to Conserve Our Natural Resources, and to Create Long-term Value for our Ratepayers.

How is Your Water?

One of our most important natural resources is our water supply. Clearly, a safe, economical and abundant drinking water supply is absolutely essential for maintaining good health. Water resources are also important in maintaining the economic vitality of our community.

This report has been prepared in accordance with the requirements of the Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) to inform you about the quality of your water.

2019 Water Quality Testing Result Table for the Orange Park Grid

Contaminant Unit of Measurement	Dates of sampling	Y/N MCL Violation	Level Detected at WTPs											Range of Results	MC LG	MCL	Likely Source of Contamination
			MB 1	LB 2	RC 3	TW 4	GW 5	OS 6	RL 7	OJ 8	SC 9	OL 10	MHS 11				
Inorganic Contaminants – 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																	
Antimony (ppb)	10/2017, 11/2017	N	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND - 0.1	6.0	6.0	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Barium (ppm)	10/2017, 11/2017	N	0.017	0.015	0.012	0.011	0.0083	0.011	0.0087	0.010	0.015	0.010	0.0078	0.0078 - 0.12	2.0	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	10/2017, 11/2017	N	0.22	0.34	0.27	0.16	0.15	0.12	0.13	0.16	0.28	0.21	0.22	0.12 - 0.28	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth at optimum levels between 0.7 - 1.3 ppm; discharge from fertilizer and aluminum factories.
Lead (point of entry) (ppb)	10/2017, 11/2017	N	ND	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND - 0.6	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Sodium (ppm)	10/2017, 11/2017	N	10.0	6.6	7.2	5.1	4.6	5.3	5.2	4.7	6.7	5.6	4.7	4.6 - 10.0	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectant/Stage 2 Disinfection By-Product (S2 DBP) Parameters - For Chlorine, the level detected is the annual average of the monthly averages. For Haloacetic Acids and TTHM, the level detected is the locational running annual average (RAA). – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.). Range of results is (lowest to highest) at the individual sampling sites.

Contaminant Unit of Measurement	Dates of sampling	Y/N MCL Violation	Level Detected	Range of Results	MC LG	MCL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	Q - 2019	N	20.298	15.04 - 26.06	N/A	80	Water additive used to control microbes.
Haloacetic Acids (five) (HAA5) (ppb)	Q - 2019	N	8.04	2.24 - 12.66	N/A	60	By-product of drinking water chlorination.
Chlorine (ppm)	2019	N	1.95	1.4 - 2.5	4.0	4.0	Water additive to control microbes.

Lead and Copper (Tap Water)

Contaminant/Unit	Dates	AL Violation Y/N	90 th Percentile Result	No. of samples exceeding AL	MCLG	MCL	Likely Source of Contamination
	OPGrid	OPGrid	OPGrid	OPGrid			
Copper (ppm)	06/2019	N	0.014	0 of 52	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Definitions:											
AL	Action Level – Concentration of a contaminant, if exceeded, triggers treatment or other requirements that a water system must follow.										
MRDL	Maximum Residual Disinfectant Level – 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.										
MCL	Max 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.										
ND	Means “not detected” and indicates that the substance was not found by laboratory analysis.			CDC	Center for Disease Control	N/A	Not Applicable	OPGrid	All water treatment plants in this system		
MRDLG	Maximum Residual Disinfectant 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.					GW	Greenwood	LB	Lucy Branch	MHS	Middleburg High School
						OJ	Old Jennings Rd	RL	Ridaught	WTP	Water Treatment Plant
PPM	Parts per Million -1 part by weight of analyte to 1,000,000 parts by weight of water sample.					MB	Meadowbrook	RC	Ridgecrest	OPS	Orange Park South
PPB	Parts per Billion - 1 part by weight of analyte to 1,000,000,000 parts by weight of water sample.					OL	Oakleaf Plantation	TW	Tanglewood	SC	Spencer’s Crossing
pCi/l	Picocuries per liter - Measure of radioactivity in water.										

The Florida Department of Environmental Protection (FDEP) has performed a source water assessment on our system in 2019 and search of the data sources indicated seventeen (17) sources that have a low to moderate susceptibility level as potential sources of contamination near our wells. The assessment results are available on the DEP Source Water Assessment and Protection Program website at <http://www.dep.state.fl.us/swapp>.

- WATER SUPPLY -

The Clay County Utility Authority 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 to December 31, 2019. Data obtained before January 1, 2019 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Our community is blessed with an abundant supply of drinking water. Our water comes from the Floridan Aquifer. The Floridan Aquifer is a vast area that underlies approximately 100,000 square miles in southern Alabama, southeastern Georgia, southern South Carolina and all of Florida. The Floridan Aquifer contains high quality ground water that is confined well below ground level.

Geologic formations, known as confining layers protect ground water from contamination. Locally, Keystone Heights is a primary recharge area for the Floridan Aquifer. Natural recharge from areas as far away as Georgia also helps to maintain water levels in the aquifer.

In your area, we use twenty-six (26) wells located at eleven (11) separate water treatment plants (***known as the Orange Park Grid***) to withdraw water from the Floridan aquifer. These wells average approximately 1,000 feet in depth. After water has been withdrawn from the aquifer, it is aerated, disinfected and then pumped to your home. Our highest priority at the Clay County Utility Authority is to ensure our customers have safe drinking water. In order to make sure we have an adequate water supply in the future, the Authority has implemented an impressive water resource protection and conservation program. ❖

-We Welcome Your Views-

The Clay County Utility Authority’s Board of Supervisors meets at 2:00 p.m. on the first and third Tuesday of each month. Board sessions are open to the public and are held in the boardroom at our facility at 3176 Old Jennings Rd., Middleburg, FL 32068. We are also pleased to announce that this information and much more can be found on our website at <http://www.clayutility.org>.

If you have questions regarding this brochure or are interested in learning more about your water quality, feel free to call our office, and ask for Ross Bland or Amy Palmeri. To arrange a tour of one of our facilities for your organization, contact our public relations department at 904-272-5999. ❖