University of Central Florida

Orlando, Florida

"Quality on Tap"

Consumer Confidence Report

Report Date: June 2017

Quality on Tap Report

Consumer Confidence Report for Year 2016

University of Central Florida

Orlando, FL

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of 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 our ongoing efforts to improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is groundwater via four wells, which are on the premises, and taken from the Floridan Aquifer. Currently, the water is being treated two ways: chlorination for disinfection and aeration for removal of sulfur gases.

In (2016) the 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 (or surface water intakes). There are 3 (three) potential source of contamination identified for this system with a (MODERATE) susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp, or they can be obtained from Utilities and Energy Services at 407-823-6789.

Thank you for allowing us to continue providing you with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. If you have any questions about this report or concerning your water utility, please contact Utilities and Energy Services at 407-823-6789 at any time during regular business hours. We want our valued consumers to be informed about their water utility.

The University of Central Florida routinely monitors for contaminants in your drinking water according to federal and state laws. Except where indicated otherwise, this report is based on the results of our monitoring for the period of **January 1 to December 31, 2016**. Data obtained before January 1, 2016, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

University of Central Florida has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish that we did the sampling and only report the analytical results that are over the Method Reporting Limit (MRL) of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

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

Method Reporting Limit (MRL): The lowest amount of an analyte in a sample that can be quantitatively determined with stated, acceptable precision and accuracy under stated analytical conditions (i.e., the lower limit of quantitation). Therefore, analyses are calibrated to the MRL, or lower.

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.

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.

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.

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.

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. "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 analyte to 1 million parts by weight of the water sample.

Parts per billion (ppb) or Micrograms per liter (mg/l) – one part by weight of analyte to 1 billion parts by weight of the water sample.

Pico curie per liter (pCi/L) - measure of the radioactivity in water.

Not Applicable (N/A) – Noted in the chart if the data is not applicable to that parameter.

TEST RESULTS TABLE										
Radiological Contaminants										
Contaminant and Unit of Measurement	Date of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination			
Gross Alpha (pCi/L)	03/14	N	2.4	0 - 2.4	0	15	Erosion of natural deposits			
Radium 226 + 228 or combined radium (pCi/L)	03/14	N	0.6	0 - 0.6	0	5	Erosion of natural deposits			
Inorganic Contaminants										
Barium (ppm)	03/14	N	0.015	0 - 0.015	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Sodium (ppm)	03/14	N	14.0	N/A	N/A	160	Salt water intrusion, leaching from soil.			
Fluoride	03/14	N	0.14	N/A	4	4	Erosion of natural deposits			
TTHMs and Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Parameters										
Contaminant and Unit of Measurement	Date of sample analysis	MCL Violation Y/N	Level Detected	Range of	MCLG	MCL	Likely Source of Contamination			
Chlorine (ppm)	1/16- 12/16	N	1.350652	0.32 – 1.96	4.0	4.0	Water Additive used to control microbes			
Haloacetic Acids (five) (HAA5) (ppb)	7/15 - 6/16	N	35.45	7.49 - 38.92	N/A	60	By-product of drinking water disinfection			
TTHM [Total trihalomethanes] (ppb)	1/16 - 12/16	N	54.6675	24.40 - 85.80	N/A	80	By-product of drinking water chlorination			
Lead and Copper – "Around the campus" Tap Water Testing										
Contaminant and Unit of Measurement	Date of sample analysis	AL Violation Y/N	90 th Percentile Result	No. of sampling sites exceeding	MCLG	AL (Action Level)	Likely Source of Contamination			
Copper (tap water) (ppm)	10/14	N	0.16	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
Lead (tap water) (ppb)	10/14	N	2.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits			

Unregulated Contaminants Monitoring 3 Parameters									
Contaminant and Unit of Measurement	Date of sample	MRL	Average Level Detected	Range		Likely Source of Contamination			
Hexavalent Chromium	3/10/15- 8/25/15	0.03	.07875	0.051 - 0.10		Natural occurring elemental metal found in rocks and soil.			
Chlorate	3/10/15- 8/25/15	20	946.501 25	571.874 – 1357.781		Agricultural defoliant or desiccant; disinfection by-product			
Strontium	3/10/15- 8/25/15	0.30	257.487	247.682 - 270.658		Natural occurring element found in soil and present in plants and animals.			
Vanadium	3/10/15- 8/25/15	0.20	0.3065	0.304 - 0.312		Natural occurring elemental metal found in rocks and soil.			
HCFC-22	3/10/15- 8/25/15	0.08	0.095	ND - 0.095		Chlorofluorocarbon occurs as a gas, used as a refrigerant, low temperature solvent and fluorocarbon resins			
Chromium	3/10/15- 8/25/15	0.20	0.20	ND - 0.20		Natural occurring elemental metal used in making steel, chrome plating, dyes, leather tanning and wood preservation			

We monitored for Unregulated Contaminants (UCs) in 2015 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the detected analytical results of our UC monitoring in our annual water quality report. For the complete list of results, including the non-detected contaminants, contact <u>Larry Eflin</u> at 407-823-4659. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (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. UCF 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. 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.

If there are MCL violations or certain other types of violations, they would be noted in the chart on this page, then the following would contain statements regarding the health effects corresponding to each violation and explanations of what the potential causes were and what procedures or measures were taken to prevent future violations.

MCLs 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. Some parameters do not have health concerns at this time; therefore they do not have health effects language in this report. All parameters that have been tested are listed in table form on the preceding page.

In addition, the results of the unregulated contaminant sampling required by U.S Environmental Protection Agency are available to the public. For more information, please call EPA's Safe Drinking Water Hotline at 1-800-426-4791, or access EPA's drinking water web site at: http://www.epa.gov/safewater.

The sources of drinking water, for 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 byproducts 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 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.

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 1-800-426-4791.

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 (800-426-4791).

We at the University of Central Florida work around the clock to provide top quality water to every tap. We ask that all of our consumers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

We are committed to ensuring the quality of your water. If you have any questions or concerns about information provided, please feel free to call us at 407-823- 6789. UCF's drinking water meets established, acceptable parameters set forth by the EPA.