

Annual Drinking Water Quality Report

City of South Daytona 2017

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 we deliver to you every day. Our goal is to provide you with a pleasant, safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Our water is purchased from the City of Daytona Beach, which comes from a series of 24 deep wells (>200 ft. deep) that tap into the Floridan Aquifer. This is a vast underground water source that stretches from South Carolina to include the State of Florida. Although this water is very high in quality it does contain dissolved minerals and natural organics, which need to be monitored and treated. The water is treated at the Ralph Brennan Plant, located in Daytona Beach, through ozonation, softening, filtration, and chloramine disinfection processes. An inhibitor is added to reduce corrosion of your household plumbing and the naturally occurring fluoride content is supplemented at a level recommended by the American Dental Health Association.

We're proud to report that your drinking water meets or exceeds all Federal and State requirements. As with all drinking water, we have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

The Cities of South Daytona and Daytona Beach routinely monitor for over 80 primary and secondary contaminants in your drinking water according to Federal and State laws, rules and regulations throughout the year. The primary contaminants include compounds (mostly metals), volatile compounds, pesticides, PCBs, and radionuclides. Secondary contaminants include compounds associated with the aesthetic quality of water. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2017. Data obtained before January 1, 2017 and presented in this report are from the most recent testing done in accordance with laws, rules and regulations. Those contaminants listed in the tables that follow are the only contaminants detected in your drinking water.

If you have any questions about this report or your water utility, please contact Les Gillis, Public Works Director at 322-3080. We want our valued residents to be informed about their water utility.

In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

- 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 (µg/L): one part by weight of analyte to 1 billion parts by weight of the water sample.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- 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 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.
- 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 a substance was not found by laboratory analysis.

- N/A- not applicable.
- Treatment Technique (TT): A required process intended to reduce the level of contamination in drinking water.
- Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

CITY OF SOUTH DAYTONA WATER TEST RESULTS 2016

Inorganic Contaminants (Tap Samples)	Dates of Sampling	AL violation Y/N	90 th Percentile Results	No of sampling sites exceeding the AL	MCLG	Action Level	Likely Source of Contamination
Lead (ppb)	06/17-07/17	N	2.0	0	0	15	Corrosion of household plumbing system
Copper (ppm)	06/17-07/17	N	0.035	0	1.3	1.3	Corrosion of household plumbing system

Note: 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 South Daytona 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 or at <http://www.epa.gov/safewater/lead>.

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of Sampling	TT Violation	Result	MCLG	TT	Likely Source of Contaminant
Total Coliform Bacteria	1/17-12/17	Y	Positive	N/A	TT	Naturally present in environment

Coliforms are a bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments. We found coliforms in more than one of the water samples collected from our distribution system in January of 2017. When this occurs, we are required to conduct an assessment to identify potential problems and to correct any problems discovered.

During the past year we were required to conduct one Level 2 Assessment. One Level 2 assessment was completed. In addition, we were required to take the following corrective actions:

- Develop a comprehensive flushing program to identify potential areas of concern.
- Continually train operators in proper techniques in flushing water.
- Assign operators sections to maintain proper levels of disinfectant residual, hydrant maintenance, and all valves are open to ensure proper circulation.
- Develop a SOP for water line breaks, including restoration of service and proper flushing of affected lines.

Stage 2 Disinfectants and Disinfection By-Products

Contaminates and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL	Likely Source Of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	01/17-12/17	N	30.6	16.0-40.8	N/A	MCL=60	By-product of drinking water disinfection
TTHM {Total trihalomethanes} (ppb)	01/17-12/17	N	66.7	46.6-92.9	N/A	MCL=80	By-product of drinking water disinfection
Chloramines and Chlorine (ppm)	01/17-12/17	N	3.06	0.2-5.5	MRDLG=4	MRDL = 4	Water additive used to control microbes

Samples collected during 2017 had a TTHM result of 92.9 ppb at 3228 S. Palmetto Ave., 88.5 ppb at 504 Big Tree Rd., 91.4 ppb at 2400 Ridgewood Ave., and 89.0 ppb at 735 Beville Rd., which exceeds the MCL of 80 ppb. However, the system did not incur an MCL violation, because all annual average results at all sites were at or below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

CITY OF DAYTONA BEACH WATER TEST RESULTS 2016

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
Fluoride (ppm)	02/17	N	0.59	0.59	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)	02/17	N	39.9	39.9	N/A	160	Salt water intrusion leaching from soil
Nitrate (ppm)	02/17	N	0.087	0.087	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Stage 1 Disinfectants and Disinfection By-Products

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
Bromate (ppb)	01/16-12/16	N	6.0	ND-12	0	10	By-product of drinking water disinfection

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
Dalapon (ppb)	06/17	N	1.3	1.3	200	200	Runoff of herbicide used on rights of way.

In 2017 the Department of Environmental Protection performed a Source Water Assessment on the Daytona Beach system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their 24 wells, identifying twenty-five unique potential sources of contamination. The susceptibility levels are rated from low to high. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <http://fldep.dep.state.fl.us/swapp/> or from the Public Works Department at (386) 322- 3080.

Additional 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:

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 also, can 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.

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. 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 the potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 an one-in-a-million chance of having the described health effect.

IMPORTANT INFORMATION FOR YOU TO KNOW – HEALTH 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 contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

FOR MORE INFORMATION:

Volusia County Health Department – call the Environmental Engineering Section at 386-274-0546

Safe Drinking Water Hotline - 800-426-4791

South Daytona Utility Billing - 386-322-3002 concerning your utility bill.

South Daytona Public Works Department –386-322-3080

South Daytona City Council Meetings – held the second and fourth Tuesday of each month at 6:00 PM at the Council Chambers at South Daytona City Hall, 1672 S. Ridgewood Avenue, South Daytona.

Visit our website: City of South Daytona – www.southdaytona.org.

After Hours Emergencies: Call 386-323-3568

Just a Reminder:

Water Wisely!

Landscape irrigation in Volusia County is limited to 4:00 p.m. to 10:00 a.m.

Eastern Standard Time: Once a week

ODD Numbered Addresses: Saturday

EVEN Numbered Addresses: Sunday

Daylight Savings Time: Twice a week

ODD numbered addresses: Wednesday and Saturday

EVEN numbered addresses: Thursday and Sunday

This applies to private wells, lakes and ponds, and city water.