

2010 Annual Drinking Water Quality Report Volusia County Utilities' Lakes of Pine Run

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality 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 the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Volusia County Utilities purchases its water from the Village of Pine Run Utility Corporation (VPRUC). Their water source is groundwater pulled from the Floridan Aquifer. The water is aerated to reduce taste and odors and then chloramines are added for disinfection. A phosphate-based corrosion inhibitor is also added to reduce lead and copper levels.

This report shows our water quality results and what they mean.

In 2009 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 VPRUC's wells (or surface water intakes). There is one potential source of contamination identified for this system, the VPRUC's wastewater plant with a low 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 the office of "The Lakes of Pine Run Condominiums."

The Lakes of Pine Run Condominium Association and Volusia County Utilities routinely monitor 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 1st to December 31st 2010. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative of the most recent monitoring, is more than one year old.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

- Maximum Contaminant Level or 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 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.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Non Applicable – (N/A): Does not apply
- "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 (µg/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.
- MRDL – Maximum residual disinfectant level goal – 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 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.

Test Result Table for Volusia County Utilities' Lakes of Pine Run (PWS# 3644349)

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 or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	1/10-12/10	N	1.8	0.6 - 4.2	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Lead and Copper (Tap Water)							
Copper (tap water) (ppm)	06/10 10/10	N	0.91 0.84	1	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	06/10 10/10	N	0.8 ND	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Test Results Table for the Lakes of Pine Run Condominium Association

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
Inorganic Contaminants							
Barium (ppm)	11/09	N	0.014	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	11/09	N	5.4	NA	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Nickel (ppb)	11/09	N	1.7	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Fluoride (ppm)	11/09	N	0.23	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.2 ppm
Sodium (ppm)	11/09	N	79.7	N/A	N/A	160	Salt water intrusion, leaching from soil
Nitrate (mg/L)	01/10	N	0.094	N/A	10	10	Run-off from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Volatile Organic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Xylenes (ppm)	01/10 – 12/10	N	0.0037	ND-0.0037	10	10	Discharge from petroleum factories, discharge from chemical factories

Stage 1 Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	07/10	N	11.9	N/A	N/A	MCL = 60	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	07/10	N	37.4	N/A	N/A	MCL = 80	By-product of drinking water disinfection

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. Volusia County Utilities' Lakes of Pine Run 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 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>.

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, the United States Environmental Protection Agency 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 potential health effects can be obtained by calling the USEPA'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)

If you have any questions about your utility operations or this report please feel free to call Volusia County Water Resources and Utilities at (386) 822-6465 from 8:00 AM to 4:00 PM, Monday through Friday. As always you may also contact your County Council representative with your comments and concerns. The County Council meet on the first and third Thursday of every month at the County Administration Building, 123 W. Indiana Avenue in DeLand.

