



**ORIGINAL** 0700006-07  
 RECEIVED  
 07 JUN -6 AM 9:50  
 COMMUNICATIONS SECTION

**Annual Drinking Water Quality Report for 2006**

**Brendenwood Water System**

Florida Department of Environmental Protection Public Water System ID # 3354043

We're pleased to provide you with this year's Annual Water Quality Report. The 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 dependable supply of quality 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. This report shows our water quality results and what they mean.

The source of our water is groundwater from a well located in the community. The well draws from the Floridan aquifer, one of the world's most protected sources. Our water is chlorinated for disinfection purposes. In 2004 the Florida Department of Environmental Protection conducted an assessment which identifies potential sources of contamination in the vicinity of our well(s). The SWAPP (Source Water Assessment and Protection Program) determined our public water system to have a MODERATE level of concern due to an underground petroleum storage tank and a HIGH level of concern due to a delineated area (area of known groundwater contamination) in the assessment area. We will use this information for future resource and protection planning. You may obtain more information at the web site [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

If you have any questions about this report or concerning your water utility please contact **Deborah Day, (352) 383-7908**, during normal business hours. We encourage our valued customers to be informed about their water utility.

Brendenwood routinely monitors for constituents 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, 2006. Data obtained before January 1, 2006, and presented in this report are from the most recent testing performed in accordance with the laws, rules and regulations.

**Water Quality Test Results Table for Brendenwood**

Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Yes / No	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	Dec '06	No	0.50	N/A	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	Dec '06	No	0.0046	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	Dec '06	No	1.5	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Lead (point of entry) (ppb)	Dec '06	No	0.094	N/A	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (inorganic) (ppb)	Dec '06	No	0.066	N/A	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen) (ppm)	March - Dec '06	No	5.18 maximum 5.11 average	5.02 - 5.18	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	Dec '06	No	1.2	N/A	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	Dec '06	No	8.4	N/A	N/A	160	Salt water intrusion; leaching from soil
Thallium (ppb)	Dec '06	No	0.14	N/A	0.5	2	Leaching from ore-producing sites; discharge from electronics, glass, and drug factories
TTHMs and Stage 1 Disinfectant / Disinfection By-Product (D/DBP) Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Yes / No	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	2006	No	0.6 average	0.5 - 1.0	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Total trihalomethane (TTHM) (ppb)	Sept '06	No	1.38	N/A	N/A	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Yes / No	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (ppm)	Sept '05	No	0.069	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	Sept '05	No	1.4	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

DOCUMENT NUMBER-DATE

04545 JUN-6 07

FPCO-COMMISSION CLERK

In the table you may find unfamiliar terms and abbreviations. To help you better understand these terms we have provided the following definitions (please note not all definitions may pertain to your report):

- 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 (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 (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 growth.
- 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 contamination.
- ND – This abbreviation 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 of analyte (by weight) to 1 million parts of water sample (by weight).
- Parts per billion (ppb) or micrograms per Liter (µg/L) - one part of analyte (by weight) to 1 billion parts of water sample (by weight).
- Picocurie per liter (pCi/L) - measure of the radioactivity in water.

#### ***What does this mean?***

We have learned from the testing that some constituents were detected. We are required to perform monitoring quarterly for Nitrate and we unfortunately missed the 3<sup>rd</sup> quarter of 2006. This oversight resulted from a change in our operation company and we have addressed the issue with them. The results of our Nitrate testing (for the remaining quarters of the year) show a level that is elevated above one-half of the allowable limit and we will continue to monitor for this parameter as required by State regulations. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

We also were cited with a violation for delivering an inadequate CCR for 2005. The Source Water Assessment Information (SWAPP) that we show on page 1 of this report should have been included in the previous CCR. The violation has no impact on the quality of water our customers received, and it posed no health risk to public health.

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 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 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 stormwater 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 stormwater runoff, and septic systems.
- E.) Radioactive contaminants, which may 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 FDA (Food & Drug Administration) 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. Immunocompromised 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 from their health care providers about their drinking water. EPA/CDC (Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are also available from the Safe Drinking Water Hotline (800-426-4791).**

We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call the numbers listed.