

# Water Quality Testing Results

## What do these tables explain?

These tables are designed to inform you about substances that may be found in your tap water. All drinking water, including bottled water, can contain contaminants. Therefore, the Environmental Protection Agency (EPA) has established standards regulating contaminants. Our utility has never been in violation of the EPA standards.

The first table shows substances that the EPA requires our Utility to report, even though we are not in violation of their standard. To determine how our water compares to the federal regulation, compare the column that shows the level allowed by EPA (MCLs) to the column that shows the highest level detected at our utility during the year 2008.

The Environmental Protection Agency (EPA) requires the monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables below are the only contaminants detected in your drinking water. As authorized and approved by the EPA, the state has reduced monitoring requirements for certain contaminants of less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year.

### Source Water Assessment

In 2008, 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. The assessment identified 94 potential sources of contamination for our system with susceptibility levels ranging from low to moderate. The majority of sources are privately owned and operated petroleum storage tanks (gas stations) and waste clean-up facilities. The results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

## Table Definitions

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

**Initial Distribution System Evaluation (IDSE):** An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for Stage 2 DBPR.

**MCL (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 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**Mrem/yr:** Millirems per year

**MFL:** Million fibers per liter (longer than 10 micrometers)

**N/A:** Not Applicable

**pCi/l:** picocuries per liter; a measure of radiation matter in drinking water.

**ppb:** parts per billion or micrograms per liter.

**ppm:** parts per million or milligrams per liter; one part per million equals approximately one drop in 10 gallons.

**SMCL (Secondary Maximum Contaminant Level):** The highest level of a secondary contaminant that is allowed.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

PRIMARY INORGANICS	Dates of Sampling	MCL Violation	MIN Level Detected	MAX Level Detected	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	6/10/08 - 7/17/08	No	0.0032	0.0054	2	2 ppm	Erosion of natural deposits; drilling wastes, metal refineries
Chromium (ppb)	6/10/08 - 7/17/08	No	0.5	0.94	100	100 ppb	Erosion of natural deposits; discharge from steel and pulp mills
Fluoride (ppm)	6/10/08 - 7/17/08	No	0.673	0.885	4	4 ppm	Additive to promote strong teeth; erosion of natural deposits; fertilizers
Nitrate, as Nitrogen (ppm)	6/10/08 - 7/17/08	No	0.01	0.09	10	10 ppm	Natural occurrence in soil; fertilizer runoff; leaching from septic tanks
Nitrite, as Nitrogen (ppm)	6/10/08 - 7/17/08	No	0.01	0.03	1	1 ppm	Fertilizer runoff, leaching from septic tanks, erosion of natural deposits
Selenium (ppb)	6/10/08 - 7/17/08	No	0.89	2.07	50	50 ppb	Discharge from petroleum / metal refineries; erosion of natural deposits
Sodium (ppm)	6/10/08 - 7/17/08	No	25	48.4	N/A	160 ppm	Salt water intrusion, leaching from soil

RADIOLOGICAL CONTAMINANTS	Dates of Sampling	MCL Violation	Reported Ranges	MAX Level Detected	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	6/10/08 - 7/17/08	No	0.08 - 1.86	1.86	0	15 pCi/L	Erosion of natural deposits
Combined Radium (pCi/L)	6/10/08 - 7/17/08	No	-0.03 - 2.02	2.02	0	5 pCi/L	Erosion of natural deposits

DISINFECTION BYPRODUCTS	Dates of Sampling	MCL Violation	Range of Results	Level Detected	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Bromate (ppb)	6/10/08 - 7/17/08	No	0.59 - 12 †	4.03 *	0	10 ppb	By-product of drinking water disinfection
Chloramines (ppm)	6/10/08 - 7/17/08	No	0.1 - 5.6 ††	3.11 *	4	4 ppm	Water additive used to control microbes
Total Trihalomethanes (ppb)	6/10/08 - 7/17/08	No	8.6 - 69.5	24.68 **	N/A	80 ppb	By-product of drinking water chlorination
HAA5 (ppb)	6/10/08 - 7/17/08	No	2.6 - 46.1	17.82 **	N/A	60 ppb	By-product of drinking water chlorination

\* The results in the column indicating "Level Detected" for bromate and chloramines are the monthly running annual averages from all sampling sites.

\*\* The results in the column indicating "Level Detected" for total trihalomethanes and HAA5 are the highest of the four quarterly running annual averages from all sampling sites.

† The range of results indicates the highest and lowest of the individual sampling sites. The highest level detected for bromate represents 1 out of 25 samples.

†† The highest level detected for chloramines represents 1 out of 7,300 samples.

LEAD & COPPER	Dates of Sampling	AL Violation	Detected 90th Percentile	Sample Sites Exceeding AL	MCLG	AL	Likely Source of Contamination
Copper at the tap (ppm)	5/12/08 - 6/11/08	No	0.376	0	1.3 ppm	1.3 ppm	Erosion of natural deposits, household plumbing corrosion
Lead at the tap (ppb)	5/12/08 - 6/11/08	No	9.3	6	0	15 ppb	Erosion of natural deposits, household plumbing corrosion

LEAD & COPPER (2nd round of sampling)	Dates of Sampling	AL Violation	Detected 90th Percentile	Sample Sites Exceeding AL	MCLG	AL	Likely Source of Contamination
Copper at the tap (ppm)	9/4/08 - 9/16/08	No	0.175	0	1.3 ppm	1.3 ppm	Erosion of natural deposits, household plumbing corrosion
Lead at the tap (ppb)	9/4/08 - 9/16/08	No	9.9	8	0	15 ppb	Erosion of natural deposits, household plumbing corrosion

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. Palm Beach County Water Utilities Department 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>.

### NO PHARMACEUTICALS FOUND IN OUR DRINKING WATER

In March of 2008, there were a series of articles published that reported wide-spread presence of pharmaceutical compounds in drinking water throughout the U.S. At the request of Palm Beach County Water Utilities Department, the United States Geological Survey (USGS) tested samples from our water treatment plants for 16 common pharmaceutical compounds. The results of this testing did NOT indicate the presence of any of the listed compounds in our water. In fact, of the 50 metropolitan areas tested, Palm Beach County was one of the 11 sites that had no pharmaceutical compounds detected.

MICROBIOLOGICAL DATA	Likely Source of Contamination
Total Coliform	Not Detected Naturally present in the environment
Fecal Coliform	Not Detected Human and animal fecal waste

We are in your neighborhoods daily collecting samples for microbiological analyses. We are pleased to report that all of the 4,609 samples collected were negative. The maximum contaminant level for coliform bacteria is based on the presence or absence of total coliform in a sample.

As you can see by the tables, our system had **NO VIOLATIONS**. We're proud that your drinking water meets or exceeds all Federal and State requirements.



**Palm Beach County Water Utilities Department**  
**BEST WATER, BEST SERVICE, & BEST ENVIRONMENTAL STEWARDSHIP.**