



2010 Water Quality Report

For the City of Ocala, Florida

(PWS-ID # 342-0922)

Highest Quality Drinking Water Possible

We are pleased to provide you with this year's Annual Water Quality Report. The city wants to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is to continue to provide you a safe and dependable supply of drinking water.

Our water is obtained from ground water wells which draw from the Floridan Aquifer. Our water is softened and chlorinated for disinfecting purposes and fluoridated for dental health purposes. We ensure that your water meets or exceeds all current federal and state drinking water standards. Ocala's water treatment facilities have won numerous Department of Environmental Protection awards for excellence in operations and maintenance.

In 2009, the Florida Department of Environmental Protection (FDEP) 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. There are 114 potential sources of contamination identified for this system with low to high susceptibility levels. The assessment results are available on the FDEP Source Water Assessment & Protection Program (SWAPP) website at: <http://www.dep.state.fl.us/swapp/>.

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

Microbiological Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL Violation Y/N	Highest Monthly Percentage/Number	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria*	08/10	N	1.49%	0	5%	Naturally present in the environment	
* Total coliform bacteria: Highest Monthly Percentage/Number is the highest monthly percentage of positive samples for systems collecting at least 40 samples per month.							
Radiological 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
Alpha emitters (pCi/L)	02/08	N	3.0	ND-3.0	0	15	Erosion of natural deposits
Uranium (ug/L)	03/08	N	0.57	0.23-0.57	0	30	Erosion of natural deposits
Inorganic Contaminants							
Cadmium (ppb)	02/08	N	1.5	ND-1.5	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Fluoride (ppm)	02/08	N	0.61	0.16-0.61	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 1.3 ppm
Lead (point of entry) (ppb)	02/08	N	2.1	ND-2.1	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (inorganic) (ppb)	02/08	N	0.4	0.3-0.4	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen) (ppm)	06/10	N	1.6	1.5-1.6	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	02/08	N	9.4	6.0-9.4	N/A	160	Salt water intrusion, leaching from soil
** Results in the Level Detected column for radiological contaminants and inorganic contaminants are the high average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.							

The city of Ocala routinely monitors 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 for the period January 1, 2010 through December 31, 2010. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. Data obtained before January 1, 2010, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. As you can see by the table, our water system had no maximum contaminant level violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. While we have learned through our monitoring and testing that some constituents have been detected, the presence of some contaminants does not necessarily indicate that the water poses a health risk.

Maximum Contaminant Levels (as seen in the chart) are set at very stringent levels. To understand the possible health effects described for many regulated contaminants: A person would have to drink two liters of water every day for a lifetime at the MCL to have a one-in-a-million chance of having the described health effect.

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. We are 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.

Stage 1 Disinfectant 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
Chlorine (ppm)	01/10-12/10	N	0.93	0.51-1.73	MRDLG=4	MRDL=4.0	Water additive used to control microbes
TTHM (Total Trihalomethanes) (ppb)	07/10	N	23.1	23.1	N/A	MCL=80	By-product of drinking water disinfection
Haloacetic acids (five) (HAA5) (ppb)	07/10	N	2.0	2.0	N/A	MCL=60	By-product of drinking water disinfection

For chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the average of all samples taken during the year. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.

Lead and Copper (Tap Water)

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
Copper (Tap Water) (ppm)	08/10-09/10	N	0.0095	---	1.3	1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives
Lead (Tap Water) (ppb)	08/10-09/10	N	1.4	1	0	15	Corrosion of household plumbing systems

To help you understand the terms and abbreviations in the accompanying tables, we have provided the following definitions:

Action Level (AL): The concentration of a contaminant which, 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 the highest concentrations of trihalomethanes (TTHM's) and Haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

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 contaminants.

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.

Not Detected (ND): 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 one million parts by weight of water.

Parts per billion (ppb) or micrograms per Liter (ug/L): One part by weight of analyte to one billion parts by weight of water.

Picocurie per Liter (pCi/L): Measure of the radioactivity in water.

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

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>.

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).



1805 NE 30 Ave.
 Building 600
 Ocala, FL 34470-4882

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The city of Ocala 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 the analytical results 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.

Water conservation tips are available at www.ocalafl.org under city departments/water & sewer. If you have any questions, please feel free to call our office directly at (352) 351-6772.

Unregulated Contaminants			
Contaminant	Level Detected	Range	Likely Source of Contamination
Dimethoate	ND	N/A	Insecticide used on cotton and other field crops, orchard crops, vegetable crops, in forestry and for residential uses.
2,2,4,4,5,5-Hexabromobiphenyl	ND	N/A	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams).
2,2,4,4,5,5-Hexabromodiphenyl ether	ND	N/A	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams).
2,2,4,4,5-Pentabromodiphenyl ether	ND	N/A	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams).
2,2,4,4,6-Pentabromodiphenyl ether	ND	N/A	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams).
Terbufos Sulfone	ND	N/A	Degradate of the parent compound, terbufos; terbufos used for systemic control of soil-borne insects and nematodes in fields of corn, grain, sorghum and sugar beets.
2,2,4,4-Tetrabromodiphenyl ether	ND	N/A	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams).
1, 3-Dinitrobenzene	ND	N/A	Used in explosives; also formed as a by-product during the manufacture of the explosive TNT; used in the manufacture of aramid fibers, spandex, and dyes.
2,4,6-Trinitrotoluene (TNT)	ND	N/A	Used as an explosive in bombs and grenades, also used as a propellant, small amounts used for industrial explosive applications, such as deep well and underwater blasting; chemical intermediate in manufacture of dyestuffs and photographic chemicals.
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	ND	N/A	Used in detonators, primers, mines, rocket boosters, and plastic explosives; used in fireworks and demolition blocks, and as a rodenticide.