

2015 Annual Drinking Water Quality Report
Pasco County Utilities – Crystal Springs Water System
PWS ID No. 651-0216

We are 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. As such, 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. Our water source for this area is currently groundwater from two wells operated by Pasco County. These wells draw from the Floridan Aquifer. Chlorine is added for disinfectant purposes.

Pasco County 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 of our monitoring for the period of January 1 to December 31, 2015. As authorized and approved by the Environmental Protection Agency (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. Since certain parameters are only required to be sampled once every three years, some of our data; e.g., for organic contaminants, though representative, may be more than one year old.

In the tables below, you will find terms and abbreviations you might not be familiar with. To help you better understand these terms, 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.

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 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 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.

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.

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 one million parts by weight of the water sample.

Parts per billion (ppb) or micrograms per liter ($\mu\text{g/l}$): One part by weight of analyte to one billion parts by weight of the water sample.

Picocurie per liter (pCi/l): Measure of the radioactivity in water.

N/A: not applicable.

TEST RESULTS TABLES

Note: The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of our data, though representative, may be more than one year old.

Water Quality Testing Results: 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
Arsenic (ppb)	5/2015	N	2.1	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	5/2015	N	0.0059	N/A	2.0	2.0	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits
Chromium (ppb)	5/2015	N	5.4	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	5/2015	N	0.12	N/A	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
Nickel (ppb)	5/2015	N	2.1	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (ppm) [as Nitrogen]	2/2015	N	1.36	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrite (ppm) [as Nitrogen]	2/2015 5/2015	N	0.01	ND - 0.01	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	5/2015	N	4.6	N/A	50	50	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines
Sodium (ppm)	5/2015	N	7.8	N/A	N/A	160	Salt water intrusion; leaching from soil

Water Quality Testing Results: Lead and Copper [Tap Water]							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation (Y/N)	90 th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper [tap water] (ppm)	9/2015	N	0.219	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	9/2015	N	2	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Water Quality Testing Results: Radioactive 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) (incl. Uranium)	5/2015	N	5.2	N/A	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/l)	5/2015	N	0.8	N/A	0	5	Erosion of natural deposits

Water Quality Testing Results: Disinfectants & Disinfection By-Products (D/DBP)							
For the following disinfectant residuals, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results (lowest to highest) of all the individual samples collected during the past year.							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation (Y/N)	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	1-12/2015	N	1.08	0.7 – 1.4	4	4	Water additive used to control microbes
For the following disinfection by-products monitored under Stage 2 D/DBP regulations, the level detected is equal to the highest annual average (computed quarterly) for any single sampling point. Note: If the system was sampled annually, level detected is equal to the highest single sample result, and Range of Results is the range of results (lowest to highest) at the individual sampling sites.							
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
Haloacetic acids (five) [HAA5] (ppb)	7/2015	N	50.6	3.96 – 50.6	N/A	60	By-product of drinking water chlorination
Total trihalomethanes [TTHM] (ppb)	7/2015	N	4.2	3.9 – 4.2	N/A	80	By-product of drinking water chlorination

In 2015, the Department of Environmental Protection performed a Source Water Assessment on the Crystal Springs Water System and data sources indicated no potential sources of contamination near our two wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at https://fldep.dep.state.fl.us/swapp/DisplayPWS.asp?pws_id=6510216&odate=01-OCT-15.

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 EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and 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 EPA's Safe Drinking Water Hotline (800) 426-4791.

MCLs 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 at the MCL level for a lifetime 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. Pasco County Utilities 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>.

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/Centers for Disease Control 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.

We at Pasco County Utilities would like for you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please contact the Pasco County Utilities Customer Information & Services at (727) 847-8131 x6813.

We encourage public participation in our community's decisions affecting drinking water. Regular Pasco County Board of County Commissioners meetings are held every other week at 10:00 a.m. The meetings are held at one of the following locations:

West Pasco Government Center
Board Room
7530 Little Road
New Port Richey, FL 34654

Historic Pasco County Courthouse
Board Room
37918 Meridian Avenue
Dade City, FL 33525

Please call the Zoning/Code Compliance Department at (727) 847-8110 for date and location of the meetings, or visit our website at www.pascocountyfl.net.