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# *2015 Annual Water Quality Report for Coves at Wilton Creek, Middlesex Co.*

(PWSID: 4119405) VDH District 18

## **Introduction**

This Annual Water Quality Report is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must not only meet our standards but also state and federal requirements administered by the Virginia Department of Health (VDH).

## **General Information**

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 : (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. (2) 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. (3) Pesticides and herbicides, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses. (4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum, and can also come from gas stations, urban storm water runoff, and septic systems. (5) Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities. 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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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).

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## **Sources and Treatment of YOUR Water**

Water is provided to your system by seven (7) groundwater wells. All the wells pump to the main pump station where water is stored for use. The water from all of the wells is chlorinated to prevent bacterial growth in the distribution system. Additionally, the water from well #8 is treated with Aqua Mag to sequester any iron and manganese that may be present. The main pump station is located approximately 400 feet from the subdivision Club House. The wells are relatively uniformly spaced around the well field, which is located between the subdivision and Route 3.

As a first step toward protection of our sources of drinking water, the Virginia Department of Health (VDH) evaluated the susceptibility of Virginia's water supplies to contamination. Contamination sources and pathways were reviewed using maps, known and observed activities, water quality data and information about the water source. Using criteria developed by the State in its EPA-approved Source Water Assessment Program, it was determined that, on a relative basis, wells No. 2, 4, and 6 were determined to have *low* susceptibility to contamination. The susceptibility for well nos. 1A, 3A, 7, and 8 has not been determined. Your current water quality is described in the rest of this report. A copy of the source water assessment report is available by contacting Mr. John Koontz with the Coves at Wilton Creek Property Owner's Association (603-321-2642).

## **Definitions**

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. In the tables and elsewhere in this report you will find the results of our monitoring; however, many terms and abbreviations are used that you might not be familiar with. The following definitions are provided to help you better understand these terms:

*Non-detects (ND) - lab analysis indicates that the contaminant is not present*

*Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.*

*Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.*

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.*

*Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.*

*Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*

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

*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.*

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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.

## Water Quality RESULTS

The following tables outline some of the contaminants for which your water was tested. Virginia State Law permits us to test for various contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some data though accurate may be more than one year old.

Lead and Copper Contaminants							
Contaminant	Units of Measurement	Action level	MCLG	Sample Results 90 <sup>th</sup> Percentile Value	Action Level Exceedance (Y/N)	Month of Sampling	# of Samples Exceeding Action level
Copper	ppm	1.3	1.3	0.29	N	9,11/15	0
Lead	ppb	15	0	4.4	N	9,11/15	0

*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. The Coves at Wilton Creek Homeowners Association 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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>.*

Other Chemical and Radiological Contaminants							
Contaminant	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Date of Sample
Gross Alpha	pCi/L	0	15	1.9	N	ND – 1.9	02,05/2011
Combined Radium	pCi/L	0	5	0.7	N	0.5 – 0.7	02,05/2011
Arsenic	ppm	2	2	0.0006	N	NA	04/2014
Barium	ppm	2	2	.0080	N	NA	04/2014
TTHM	ppb	NA	80	19	N	NA	07/2013

- The MCL for Beta particles is 4 mrem per year. The EPA considers 50 pCi/L to be the level of concern for beta particles.

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<b>Disinfectant</b>								
Disinfectant	Units of Measurement	MRDLG	MRDL	Level Detected (Annual Avg.)	Violation (Y/N)	Range of Results	Year	Typical Source
Chlorine	ppm	4	4	0.43	N	0.05- 1.20	2015	Water additive used to control microbes

<b>Typical Source of Contamination</b>	
<u>Contaminant</u>	<u>Source</u>
Gross Alpha	Erosion of natural deposits
Combined Radium	Erosion of natural deposits
Copper	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	Corrosion of household plumbing systems; Erosion of natural deposits.
TTHM	By-product of drinking water disinfection
Arsenic	Erosion of natural deposits
Barium	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

MCLs are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

## **Violation Information**

No monitoring, reporting, or other violations occurred during the calendar year 2015.

## **Questions???**

For more information about any aspect of your drinking water or to find out how to get involved in decisions that may affect the quality of your water, we encourage you to contact Mr. John Koontz with the Coves at Wilton Creek Property Owner's Association (603-321-2642). If you have any questions regarding water-testing results contact Gregg Arrington of Sydnor Hydro, Inc. at (804) 643-2725 ext. 227. For additional information call the *Safe Drinking Water Hotline* (1-800-426-4791).