



P.O. Box 36  
23 Main Street  
Round Hill, Va. 20141  
Phone: 540-338-7878  
Fax: 540-338-1680  
Email: rhadmin@roundhillva.org  
Web site: www.roundhillva.org

## The Town Of Round Hill Would Like to Ask The Following:

Please refrain from the use of fertilizers and pesticides on your lawn. These substances may affect surface and some subsurface waters. It's better to have a safe water supply than a ultra-green lawn.

Please refrain from flushing the following down the drain / toilet:

Pesticides, herbicides, paint, varnish, any petroleum product, and MEDICINES. Medicines flushed down the toilet may wind up in the ecosystem causing cumulative damage to organisms beneficial to the environment and us. It is better to wrap unused medicines in a plastic bag and put them in the trash for landfill. Remember: We all live downstream. Be a good neighbor. Thank you.

This Annual Drinking Water Quality Report for calendar year **2014** 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 meet state and federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about this report, or if you want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, **please contact the Town Administrator Mr. Buster Nicholson at: 540-338-7878 or the Utility Department at 540-338-4772.**

### GENERAL INFORMATION:

As per Commonwealth of Virginia requirements the following three paragraphs are required to be included in the CCR.

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: (i) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) 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; (iii) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (iv) organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (v) 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that 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 at: (1-800-426-4791).**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune 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 **More information can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at: (1-800-426-4791).**

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 Town of Round Hill 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 at: 1-800-426-4791.**

Also see: <http://www.epa.gov/safewater/lead>

### **OUR LEAD AND COPPER RESULTS WERE WELL BELOW THE ACTION LEVEL**

#### **WATER SOURCES and TREATMENT:**

The source of your drinking water is groundwater from groundwater wells. The well names and locations of wells and related infrastructure are not generally published or given out for security reasons since September 11<sup>th</sup>, 2001. The Town Utility Supervisor would be very happy to answer questions about wells and discuss matters related to wells and our infrastructure. Please call 1-540-338-4772 and your questions will be answered in a timely manner. The water is treated with chlorine at several points to provide a barrier against bacterial contamination. Filters are employed at some points to remove Iron, and Manganese. The Town does not add Fluoride to the water, however we do have naturally occurring fluoride levels (See table below). If you have concerns about fluoride supplements for your children, please discuss this with your dentist. Fluoride can and will occur naturally within a ground water supply and can change from year to year. The consumer through a private lab of your choice may conduct further testing for fluoride. Private labs can provide the customer with sample containers and the instructions on how to collect and preserve the sample to be tested for fluoride. A list of approved labs can be obtained from The Virginia Department of Health, Office of Drinking Water Culpeper Field Office at: 1-540-829-7340.

#### **SUSCEPTIBILITY:**

A source water assessment of our system was conducted by the Virginia Department of Health, in 2002. The wells were determined to be of high susceptibility to contamination using the developed criteria of the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within the last five years. The report is available for viewing by contacting The Town Administrator Mr. Buster Nicholson at 540-338-7878.

#### **DEFINITIONS:**

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

**Total Coliform Bacteria** – Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

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

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

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

**Pico curies per liter (pCi/L)** - Pico curies per liter are a measurement of the radioactivity in water.

**Action Level (AL)** - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that 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. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal, or MCLG** - the level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Secondary Maximum Contaminant Level, or SMCL** – Non-enforceable federal limits set for contaminants included in the Secondary Drinking Water Standards. The purpose of these limits is to assist public water systems in managing their drinking water for aesthetic considerations.

**Maximum Residual Disinfectant Level, or MRDL** – The highest level of a disinfectant that is 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, or MRDLG** – The level of drinking water disinfectant below, which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**VDH** - Virginia Department of Health

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Some of our water quality data may not be from the current year. This is due to the fact that the testing cycles for the various contaminants range from monthly to as long as nine years. We are following the testing and reporting schedule set by the Health Department. Even though some of our data may be more than one year old, it is current for reporting purposes.

The U.S. Environmental Protection Agency sets MCL's at very stringent levels. 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:

Did any MCL or TT violations occur during the year?

( ) Yes ( X ) No

Did any monitoring, reporting, or other violations occur during the year?

( ) Yes ( X ) No

*We are pleased to report that the Town of Round Hill did not have any violations during 2014.*

ADDITIONAL WATER SYSTEM INFORMATION:

*Other drinking water health information you should be made aware of in this report is described below.*

Many other chemicals and contaminants were tested for, and fell well below the safe maximum limit set by law. Complete testing reports can be obtained upon written request to the Town Administrator.

The Town of Round Hill has recently put two new wells in service. These sources are capable of producing approximately 175 Gallons per Minute. The water coming from this location significantly increases our daily production capabilities. This should prove to be very helpful during the summer months or other times of drought, by allowing the town to reduce the amount of water pumped from each source. These sources are being treated and have proven to not only improve production, but are also produce high quality drinking water.

CROSS CONNECTION POTENTIAL

The Town of Round Hill would like to make all customers aware that cross connections can occur when you leave your garden hose in a container or swimming pool and the siphon can cause the water to enter into the house plumbing if a pressure drop occurs with the system or your home. The Town of Round Hill has installed backflow prevention devices within your meter setter or the meter itself in some cases. This is a mechanical device that may help to prevent contaminants from entering the water system via the route of your cross connection.

Please be aware that all backflow prevention devices are mechanical and in that nature, can fail to activate upon a back flow situation. Remember to always keep your hose out of chemical sprayers, swimming pools and basins of water. If a pressure drop were to occur within your home; the water that the hose is in could be siphoned into your house plumbing. It is the homeowners' responsibility to make sure you provide an "air gap" between the ends of the hose and the actual water level. The recommended air gap is twice the diameter of the pipe or hose supplying the water. There are also atmospheric vacuum breakers that can be used to prevent backflow through hoses.

If you have any questions on backflow prevention or cross connection, please call the Utility Supervisor or Assistant Supervisor at 540-338-4772.

Things to look for:

Please sign up your cell phone pager and e-mail for Alert Loudoun at <https://alert.loudoun.gov/>

This enables The Town to send you emergency messages instantly, if necessary.

Emergency contact information:





Contact the Town of Round Hill, Town Office at 540-338-7878 Monday through Friday between the hours of 8am and 5 pm. For all emergencies and general questions on rates, cutoffs and payments.

The following numbers are for emergency contact for water and sewer issues:

After 5pm and before 8 am contact the Utility Supervisor at 540-454-1975, please leave a message if asked to do so. If no one returns a call within 20 minutes, please contact the Town Administrator at 540-454-2043 and a staff member will be contacted immediately.

Leak detection will pay for itself very quickly when you consider how much water can be lost through a pinhole leak over a period of a month. "Unaccounted for" water is a major source of higher utility bills. Higher electrical and chemical bills also result from pumping and treating lost water.

Water loss as a result of a leak .63cm diameter (1/4") can mean a loss of 14,952 gallons a day. If undetected for a period of 34 days, over one half million gallons are lost, plus resultant water damage or underground water undercutting. Besides reducing operating expenses, in many cases your utility can delay or eliminate capital expenditures for expanding water supplies by stopping your losses. The following table shows leak sizes and their approximate loss in gallons from a pressurized 60-psi pipeline.

PIPE LEAK SIZE	GALLONS LOST	
	PER DAY	PER MONTH
	360	11,160
	3,096	95,976
	8,424	261,144
	14,952	463,512

Homeowners are responsible for any leak on the customer side of the water meter. Please pay special attention to unusual moist spots or standing water in your yard when rain is not an issue.

~What can leak? ~

It's not enough to just know your toilet is leaking; you also need to know what part is leaking. Here's a list of the most common places inside the tank that can leak into the bowl.

A worn out flapper or ball, a damaged seat under the flapper, a damaged gasket under the flush valve, a hole or crack in the overflow tube, a refill valve (ball-cock) that needs a new seat or washer.

~Signs of a leak ~

There are a number of signs that a toilet needs some repairs, but many toilets leak without conspicuous indications of trouble. Here are some of the more obvious signs of a leaking toilet:  
\*\*\* If you have to jiggle the handle to make a toilet stop running.  
\*\*\* Any sounds coming from a toilet that is not being used are sure signs of leaks.  
\*\*\* If you have to hold the handle down to allow the tank to empty. This can also mean the chain or strap is too long and doesn't lift the flapper or ball high enough to float on its own.  
\*\*\* If you see water running over the top of the overflow, you definitely have a leaking refill valve. If you are unsure whether or not water is running over the top of the overflow pipe; sprinkle talcum powder on top of the water in the tank, and you can clearly see whether or not it is.  
\*\*\* If you can see water trickling down the sides of the

~The Dye Test~

However, even if your toilet doesn't have any of these symptoms, it's still possible that it is leaking. These leaks are known as SILENT LEAKS, because they usually go undetected. There is an easy test you can do that will positively tell you whether or not your toilet is leaking. And if the test shows that the toilet is leaking, there is a second test that tells you what part inside the tank is responsible and needs fixing.

Remove the cover on the toilet tank and carefully set it aside so it can't be accidently knocked over and cracked. Remove any "in-tank" bowl cleaners that color the water and begin the test with clear water in the tank as well as in the bowl.

You'll need some dye. Food coloring or instant coffee works fine. Another great suggestion from a viewer is to use several tablespoons of a powdered fruit drink mix; grape flavored is perfect. Now put enough dye in the tank water to give the water a deep color. Wait 30 minutes and make sure nobody uses the toilet. In 30 minutes if you find any of the dyed water is now in the toilet bowl -- your toilet is leaking. A properly operating toilet will store water in the tank indefinitely without any water running into the bowl.

Water on the floor around a toilet is certainly a problem. It can be dripping off a sweaty toilet tank during humid weather; it can mean the wax seal under the bowl has disintegrated, or that the bowl is cracked; or it can mean the connections under the tank are leaking.

So for now, let's say you've done the dye test and found your toilet is leaking, you now have to find out which part is the culprit ... the flush valve or the refill valve. And there's another simple little test that points to the perpetrator of the crime.

Draw a pencil line on the back wall of the tank on the inside of the tank at the waterline. Then turn the water supply off, either under the tank or at the main shutoff ~~ wait 20 to 30 minutes. If the water level remains at the pencil mark ~ the leak is occurring at the REFILL VALVE, the unit in the left side of the tank. If the water level falls below the pencil mark ~ the leak is in the FLUSH VALVE, the unit located in the center of the tank.

WATER QUALITY RESULTS

I. Microbiological Contaminants - Were there any detections? Yes ( ) As described below. No ( x ).

Contaminant	Units of Measurement	MCLG	MCL	Highest Level Detected	Violation Y / N	Range of Detection at Sampling Points	Sampling Date	Typical Source of Contamination
Total Coliform	Present / Absent	0	Presence in more than one sample each month	0	N	NA	MONTHLY - 2014	Naturally present in the environment

II. Lead and Copper Contaminants – Were there any detections? Yes (X) As described below. No ( ),

Contaminant	Units of Measurement	Action level	MCLG	Results of samples for the 90 <sup>th</sup> Percentile Value	Action Level Exceeded	Sampling Year	# Of Sampling Sites Exceeding Action level	Typical Source of Contamination
Lead	ppb	15	0	2.5	<u>NO</u>	2014	None	Corrosion of household plumbing systems.
Copper	ppm	1.3	1.3	.20	<u>NO</u>	2014	None	Corrosion of household plumbing systems.

The next lead & copper sampling round is scheduled by VDH in Summer 2015

III. Other Chemical and Radiological Contaminants – Were there any detections? Yes (X) As described below. No ( ),

Contaminant	Units of Measurement	MCLG	MCL	Highest Level Detected	Exceeds Limit? Y / N	Range of Detection at Sampling Points	Sampling Year	Typical Source of Contamination
Nitrate and Nitrite As Nitrogen	ppm	10	10	3.43	<u>NO</u>	.01 - 3.43	2014	Nitrate-nitrite (combined) – Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha	pCi/L	0	15	6.2	<u>NO</u>	ND - 6.2	2009 2010 2012	Erosion of natural deposits.
Gross Beta	pCi/L	0	50	6.3	<u>NO</u>	1.5 - 6.3	2009/2010/2012	Decay of natural and manmade deposits.
Combined Radium	pCi/L	0	5	1.8	<u>NO</u>	ND - 1.8		Erosion of natural deposits.
							2009/2010/2012	
Fluoride	ppm	4	4	1.43	<u>NO</u>	ND - 1.43	2012	Erosion of natural deposits.

IV. Disinfection Byproducts – Were there any detections? Yes (X) As described below. No ( ),

Contaminant - Substance	Units Of Measurement	MCLG	MCL	Levels Detected	Range of detection at sampling points	Violation Y / N	Sampling Year	Typical source of Contamination:
Chlorine (free)	ppm	MRDLG= 4	MRDL= 4	1.19 (average)	.12 - 2.13	<u>NO</u>	2014	Water additive used to control microbes.
Total Haloacetic acids (HAA5)	ppb	N/A	60	16 (highest)	4.7 - 16	<u>NO</u>	2014	Chlorine – By-product of water disinfection
Total Trihalomethanes (TTHM)	ppb	N/A	80	15 (highest)	13 - 15	<u>NO</u>	2014	Chlorine – By-product of water disinfection

+V. Non-regulated Contaminants – Were there any detections? Yes (X) as described below. No ( ),

Contaminant	Units of Measurement	MCLG	SMCL	Highest Level Detected	Exceeds Limit? Y / N	Range of Detection at Sampling Points	Sampling Year	Typical Source of Contamination
Hardness (as CaCO3)	ppm	N/A	N/A	233	<u>NO</u>	90 - 233	2012	Erosion of natural deposits. Naturally present in environment.
Sodium [Na]	ppm	N/A	N/A	21.5	<u>NO</u>	7.84 – 21.5	2012	Erosion of natural deposits. Naturally present in environment.

<sup>2</sup> Your Dentist may wish to know the levels of the Fluoride in your water..

The Town of Round Hill monitors contaminants based on the Health Department's pre-determined schedule set for our water system. The Town Monitors for various other 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. A complete listing can be made available upon written request to the Town Administrator Buster Nicholson at 540-338-7878.

Town of Round Hill  
23 Main Street  
P.O. Box 36  
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Customer Label

Town of Round Hill  
2014  
Consumer Confidence Report



Virginia Rural Water Association



The Town of Round Hill maintains affiliations with these professional organizations as we are devoted to assuring the best quality for our customers.

~~A Costly Oversight~~

As noted above a leaking toilet should never be ignored; it can be a very costly oversight. The "Dye Test" is so easy to do and so useful that I found it impossible to believe that it was not included in an article published in *USA Today* titled, "Tender loving care beats costly home repairs" on 20 January 2006. In the section, Managing Your Money, the article took up two-thirds of a full page complete with several photos, sidebars and a Month-by-month to-do list. It appeared they covered everything except the toilet! Because a leak inside of a toilet is often not visible or audible, too many people can't believe their high water bills are due to a neglected toilet. Make sure you add this simple test to your home maintenance to-do list.

~~ANOTHER TEST~~

If you have determined the leak is at the flush valve and you replace the ball, flapper, seal or whatever and it still leaks, there is one more test to further try and pinpoint the problem. This time turn the water off to the toilet before going to bed. In the morning, check the water level. If there's about an inch in the bottom of the tank and the water level is even with the edges of the seat, the leak is either a bad stopper (ball, flapper or whatever) or a damaged seat. On the other hand, if the tank is almost entirely empty, and the water level is below the edges of the seat, the problem is a damaged gasket under the flush valve. This means the tank will have to be separated from the bowl in order to get to the connections.

If you don't have more than one bathroom and must use the toilet during the night, flush the toilet with a bucket of water from the bathtub. Fill a scrub bucket with water and dump the water into the bowl all at one time. It will clear the bowl.