

## DID YOU KNOW ??...

### Lead Contaminants

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 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>.

We received one (1) violation for failing to send in a monthly operation report for August 2018. Monthly operation reports are to be submitted by the 10th day of the following month to the Office of Drinking Water.

**Leaking toilets** is the number one reason our customers experience higher-than-usual water bills. A tiny leak can waste hundreds, or even thousands, of gallons of water in a month. To test your toilets, place a few drops of blue food coloring in the toilet's tank. After a few minutes, check the bowl. If it is blue, your toilet is leaking.

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 can pick up substances resulting from the presence of animal activity, including human. 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 agriculture, urban storm water runoff, and residential uses; (4) Organic chemical contaminants, including synthetic and volatile organic chemicals and pharmaceuticals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, sewage treatment plants and septic systems; (5) Radioactive contaminants, which can be naturally-occurring or be the result 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).



## **A WATER QUALITY REPORT FOR THE WATER USERS OF Three Springs Water System PWSID # 2165705**

In compliance with the Safe Drinking Water Act and as a service to our water users, Rockingham County presents this report, which summarizes our efforts to provide our water users with safe drinking water. This report covers the period from January 1, 2018 to December 31, 2018.

The quality of your drinking water meets all state and federal requirements administered by the Virginia Department of Health (VDH), Office of Drinking Water.

In order for you to get the most from this report we are providing the following list of terms and definitions:

ppb-parts per billion  
mg/L– milligrams per Liter  
ND-not detected

*Nephelometric Turbidity Unit (NTU)* – nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

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

**Our Water Source**

The source of your drinking water is groundwater obtained from two drilled wells located in the McGaheysville area.

**Treatment**

Raw water is disinfected using chlorine Three Springs well water is filtered through a membrane microfiltration system, and fluoride is added.

**Source Water Assessment**

A Source Water Assessment was performed by the State to determine our water system's susceptibility to contaminants in July 2002. It was determined that our wells have a high susceptibility due to being under the direct influence of surface water. However, there has been no known contamination since 2002.

**Microbial Contaminants**

Our water system performs monthly bacteriological monitoring to test for the presence of coliform bacteria, fecal coliform and E.coli. We are required to do 7 bacteriological samples per month. Our sampling detected no coliform or fecal coliform positive results in the past twelve months.

**Lead and Copper Monitoring**

Date Last Sampled for Lead:	August 2017
90 <sup>th</sup> Percentile for Lead:	<2.0 ppb
Violation:	No
Likely Source:	Household Plumbing
Number of Sites Exceeding Lead Action Level:	1 out of 20

The action level for lead is 15 ppb.

Date Last Sampled for Copper:	August 2017
90 <sup>th</sup> Percentile for Copper:	0.14 mg/L
Violation:	No
Likely Source:	Household Plumbing
Number of Sites Exceeding Copper Action Level:	0 out of 20

The action level for copper is 1.3 mg/L.

**Chemical Monitoring**

**Note to our water users: The state requires us to monitor for certain contaminants less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data may be more than one year old.**

**Chlorine**

0.84-1.09 mg/L Daily No Violation

**Metals**

Required Sampling Frequency: Once every year

Date Last Sampled: November 2018

Barium 0.039

Likely source- Discharge of drilling wastes; discharge from metal refineries; Erosion from natural deposits.

**Radionuclides**

Last Date Sampled: November 2015

Result: Gross Beta: 2.5 ± 0.6 pCi/L No Violation

Combined Radium

Last Date Sampled: November 2015

Result: 0.8 ± 0.14 pCi/L No Violation

Gross Alpha 3.6 ± 1.5 pCi/L No Violation

**Haloacetic Acids (HAA5)**

Last Date Sampled: Quarterly 2018

ND-0.0032 mg/L Range Average 1.0 No violation

Likely source- By-product of drinking water chlorination

**Total Trihalomethanes (TTHM)**

Last Date Sampled: Quarterly 2018

0.0025-0.0071 mg/L Range 0.0040 Average No Violation

Likely source- By-product of drinking water chlorination

**Other Results**

Fluoride (range) Likely source- Water additive, Erosion of natural deposits	ND-0.87 Range  Monthly 2018
Nitrates Likely source- Fertilizer runoff, Leaching from septic tanks, seawater, erosion of natural deposits	5.45 mg/L  November 2018
Hardness (total)	202 mg/L
Turbidity (range) TT= 1.0 NTU Likely source- Soil Runoff	Max- 0.043 NTU All samples were < .300 NTU 100 % of the time Daily 2018

**Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment. 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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**General Information**

**The Board of Supervisors normally meet every month on the second Wednesday at 3:00 pm and the fourth Wednesday at 6:00 pm. in the Board of Supervisors' Meeting Room located in the Rockingham County Administration Center, 20 E Gay St, Harrisonburg, VA.**

**If you have questions or comments about this report or want more information, please feel free to contact:**

**Philip Rhodes,  
Director of Public Works  
540-564-3020**

or

**VDH Office of Drinking Water  
Lexington Regional Office  
540-463-7136**