

Virginia Ridge

Annual Drinking Water Quality Report

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2003 is designed to provide you with valuable information about your drinking water quality. We are committed to providing 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 meets all state and federal requirements administered by the Virginia Department of Health (VDH). If you have questions about this report, 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:

Mr. Stephen Rossi, Virginia Ridge Water Company, Inc. at (540)342-6600
--

GENERAL INFORMATION

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 animals or from human activity. Substances (referred to as contaminants) in source water may come from septic systems, discharges from domestic or industrial wastewater treatment facilities, agricultural and farming activities, urban stormwater runoff, residential uses, and many other types of activities. Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment.

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).

SOURCES AND TREATMENT OF YOUR DRINKING WATER

Your drinking water was groundwater obtained from one of two drilled wells. Both wells are located on the hill with the storage tank. Water is distributed throughout the system by the storage tank and distribution piping. Chlorination treatment is provided. A solution feed chlorinator blends chlorine solution with the well water before water enters the storage tank. Currently only one well (Well 3) is used, but the other well (Well 4) can be put into service immediately if needed.

SOURCE WATER ASSESSMENTS

A source water assessment has been completed by VDH. The assessment determined that the wells may be susceptible to contamination because they are located in an area that promotes migration of contaminants from land use activities of concern. More specific information may be obtained by contacting the water system representative listed above.

QUALITY OF YOUR DRINKING WATER

Your drinking water is routinely monitored according to Federal and State Regulations for a variety of contaminants. The tables that follow show the results of our monitoring for the period of January 1st through December 31st, 2003.

Most of the results in the table are from testing done in 2003. However, 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 accurate, is more than one year old.

DEFINITIONS

In the table 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:

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.

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.

Action Level - 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.

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. MCLGs allow for a margin of safety.

Variances and exemptions - state or EPA permission not to meet an MCL or a treatment technique under certain conditions

WATER QUALITY RESULTS

Microbiological

Contaminant	Unit of Measurement	MCLG	MCL	Level Found	Violation	Sample Date(s)	Typical Source of Contamination
total coliform bacteria	presence or absence	0	presence of coliform bacteria in >1 sample per month	0	no	monthly	naturally present in the environment

total coliform bacteria are analyzed monthly

Lead and Copper - most recent monitoring period 2002

Contaminant	Unit of Measurement	MCLG	MCL	90% Level	AL Exceeded	Samples > AL	Typical Source of Contamination
lead	ppb	0	AL = 15	<5	no	0	corrosion of household plumbing systems; erosion of natural deposits
copper	ppm	1.3	AL = 1.3	0.157	no	0	

lead and copper are initially analyzed semiannually, then annually, and ultimately every three years

Inorganic Contaminants

Contaminant	Unit of Measurement	MCLG	MCL	Level Found	Violation	Sample Date(s)	Typical Source of Contamination
nitrate Well 1	ppm	10	10	<0.05	no	-- 1/13/04	runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
fluoride Well 1	ppm	4	4	1.84	no	-- 1/13/04	

most inorganic contaminants are analyzed every three years - nitrate is analyzed every year

Radiological Contaminants

Contaminant	Unit of Measurement	MCLG	MCL	Level Found	Violation	Sample Date(s)	Typical Source of Contamination
gross alpha radiation Well 1	pCi/l	0	15	-- 0.4	no	11/25/03	erosion of natural deposits
gross beta radiation Well 1	pCi/l	0	50	.9	no	11/25/03	
combined radium Well 1	pCi/l	0	5	1.0 .8	no	11/25/03	erosion of natural deposits

radiological contaminants are initially analyzed quarterly, then every six years

Volatile Organic Contaminants

Contaminant	Unit of Measurement	MCLG	MCL	Level Found	Violation	Sample Date(s)	Typical Source of Contamination
no volatile organic contaminants were found in either well						12/13/03	

volatile organic contaminants are initially analyzed quarterly, then annually, and ultimately every three years

* Well 3 **Well 4

Unregulated Contaminants

Contaminant	Unit of Measurement	MCLG	MCL	Level Found	Violation	Sample Date(s)	Typical Source of Contamination
no unregulated contaminants were found in either well						12/13/03	

unregulated contaminants are initially analyzed quarterly, then annually, and ultimately every three years

* Well 3 **Well 4

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The table lists 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.

Maximum Contaminant Levels (MCL's) 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 MCL's 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

Water Quality Violations – none

Monthly Reports – Required monthly reports were not submitted to the Health Department for December 2003.

Monitoring and Reporting Violations – none

This Drinking Water Quality Report was prepared by the water company with the assistance and approval of the Virginia Department of Health. Please call if you have questions.