

CITY OF MARTINSBURG
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MARTINSBURG, WV 25401
PWSID # 3300212

April 11, 2014

**DRINKING WATER QUALITY REPORT FOR
THE YEAR 2013**

In compliance with the Safe Drinking Water Acts Amendments, The City of Martinsburg is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1st to December 31st, 2013 or earlier if not on a yearly schedule.

If you have any questions about this report or other matters concerning your water utility, please contact **Mr. Sam Blair, City of Martinsburg Water Department at (304) 264-2116**. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at **6:30 PM, the second Thursday of each month at Martinsburg City Hall, 232 North Queen Street, Martinsburg, WV.**

Where does my water come from?

Your drinking water is **ground** water that is drawn from the Kilmer Springs and a well at Big Springs.

Source Water Assessment

The two (2) sources that supply drinking water to the **City of Martinsburg** facilities have a higher susceptibility to contamination, due to the sensitive nature of the aquifer in which the drinking water wells are located and the existing potential contaminant sources identified within the area. This does not mean that the well fields will become contaminated; only that conditions are such that the ground water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report, which contains more information, is available for review or a copy will be provided to you at our office during business hours or from the WVBPB 304-558-2981.

Why must water be treated?

All drinking water contains various amounts and kinds of contaminants. Federal and state regulations establish limits, controls, and treatment practices to minimize these contaminants and reduce any subsequent health effects.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material and can pick

up substances resulting from presence of animal or human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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, farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

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.

Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

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 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 microbial contaminants are available from the Safe Drinking Water Hotline (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. Martinsburg Water Department 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 drinking 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 (800-426-4791) or at <http://epa.gov/safewater/lead>.

Definitions and abbreviations used in the table or report:

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

MCL – Maximum Contaminant Level or 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 technique.

MRDLG – Maximum Residual Disinfectant Level Goal or the level of drinking water disinfectant below which there is

no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contaminants.

MRDL – Maximum Residual Detection Level, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.

AL – Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT – Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

ppm – parts per million or milligrams per liter.

ppb – parts per billion or micrograms per liter.

pCi/l – picocuries per liter

NTU – Nephelometric Turbidity Unit, used to measure cloudiness in water.

NA – not applicable

WVBPH – West Virginia Bureau of Public Health

EPA – (United States) Environmental Protection Agency

FDA – Federal Drug Administration

EPA/CDC – Environmental Protection Agency/Center for Disease Control

Water Quality Data Table

Contaminant	Violation (Y/N)	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	0.04 (99% < 0.03)	NTU	0	TT	Soil runoff
Total Organic Carbon	N	0.98	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.0734	ppm	2	2	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	N	1	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	N	Annual avg. 0.98 Range 0.42 – 1.23	ppm	4	4	Erosion of natural deposits; Water additive that promotes strong teeth.
Copper*	N	0.270	ppm	1.3	AL=1.3	Corrosion of household plumbing
Lead*	N	<5.0	ppb	15	AL=15	Corrosion of household plumbing
Nitrate**	Y	Range 3.45 – 7.49	ppm	10	10	Runoff from fertilizer; leaching from septic tanks, sewage; erosion of natural deposits
Radioactive Contaminants						
Gross Alpha	N	0.778	pCi/l	0	5	Erosion of natural deposits
	N	0.153	pCi/l	0	15	Erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	Annual avg.= 1.1 Range = 0.70 – 1.4	ppm	4 MRDL G	4 MRDL	Water additive used to control microbes
Haloacetic acids (HAAC5)	N	Annual avg.= 1.91 Range = 1.10 – 3.58	ppb	NA	60	By-product of drinking water disinfection
Total trihalomethanes (TTHMs)	N	Annual avg.= 8.01 Range = 3.40 – 12.2	ppb	NA	80	By-product of drinking water disinfection
Unregulated Contaminants						
Sodium	N	9.44	ppm	0	20	Erosion of natural deposits
Sulfate	N	32.6	ppm	250	250	Erosion of natural deposits

*Copper and lead samples were collected from 30 are residences on August 21, 2012. Only the 90th percentile is reported. None of the samples exceeded the MCL.

** During the reporting year for 2013, we received a “Notice of Violation” letter from WVBPH for failing to complete our monitoring schedule for nitrate. Although several samples were collected and analyzed for nitrate at designated times in 2013, we neglected to collect a required 4th quarter sample at the Big Springs treatment plant. All other samples collected in 2013 contained nitrate levels below the MCL. We have taken every precaution and made every effort to return to compliance including the collection of additional samples in 2014. This is not considered an emergency. Our history has shown that our nitrate samples have been below the MCL. An additional sample was collected in February 2014 and was well below the MCL.

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill, and if untreated may die. Symptoms include shortness of breath and blue baby syndrome.