

Annual Drinking Water Quality Report for 2016

The Town of Woodsboro, Maryland

PWSID # 0100027

May, 2017

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The sources of our drinking water are the Frederick Limestone Aquifer and the Grove Limestone Aquifer. An aquifer is a sort of underground reservoir or deposit of water, which is tapped by drilling wells and pumping the water to the surface for distribution. The earth between surface sources of contamination and this underground river helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your water distribution system. We have 5 wells varying in depth from 200 to 600 feet all located within the corporate limits of the town.

We have a source water assessment plan available from our office that provides more information such as potential sources of contamination. This plan is also available from the Frederick County Public Library or from Maryland Department of the Environment (MDE).

This report outlines the quality of our finished drinking water and what that quality means.

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).

If you have any questions about this report or concerning your water utility, please contact Marc Angleberger at 301-845-4288. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Mayor and Council meetings. They are held on the second Tuesday of every month beginning at 7:00 pm at the Fire Hall on Third Street.

The Town of Woodsboro routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2016, unless otherwise noted. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory 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.

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

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

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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 - The “Goal”(MCLG) is 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Beta/photon emitters	N	10.4	pCi/l	0	50	Decay of natural and man-made deposits
Inorganic Contaminants						
Copper – Distribution (2014)	N	0.21	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead - Distribution (2014)	N	13.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Chlorine (2016)	N	1.9	ppm	4	4	Water Additive used to control microbes
Nitrate (as Nitrogen) (2016)	N	8	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride (2015)	N	.15	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (2012)	N	.0974	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel B (2012) C (2012) D (2012)	N	0.0039 0.0042 0.0046	ppm	n/a	100	Erosion of natural deposits or leaching.
Volatile Organic Contaminants						
TTHM(distribution) [Total trihalomethanes] (2016)	N	12	ppb	0	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids] (distribution) (2016)	N	6	ppb	0	60	By-product of drinking water chlorination

Note: Sources are as follows: B = Well # 2; C = Well # 3; D = Wells # 7, 14, & 2A; Test results are for CY 2016 unless otherwise noted. Some contaminants are not required to be tested for on an annual basis.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	Fecal Coliform or E. Coli MCL: A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	1	N	Naturally present in the environment.

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 Woodsboro 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Nitrate [measured as Nitrogen] – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall.

Arsenic is a semi-metal element in the periodic table. It is odorless and tasteless. It enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Violation

Arsenic - Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Violation Type

Violation Begin Violation End Violation Explanation

MONITORING, ROUTINE MAJOR 01/01/2014 12/31/2016 We failed to test our drinking water for arsenic during the period indicated.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.



Consumer Confidence Report Certification

Water System Name: Town of Woodsboro

Water System Number: 0100027 County: Frederick

I confirm that the CCR for the year **2016** has been distributed to customers (and appropriate notices of availability have been given) in accordance with COMAR 26.04.01 by July 1, 2017. I further certify that the report is correct and consistent with compliance monitoring data previously submitted to MDE.

Certified by: Name Mary E. Rice
Signature Mary E. Rice
Title Town Clerk
Phone # 301-898-3800 Date 6-14-17

Specific details on CCR distribution: (Insert **DATE** that the Actions were completed for all that apply)

6-19-17 CCR was delivered to MDE.

CCR was distributed to customers by:

- Mail
- Other methods _____
- Approved electronic delivery plan is on file with MDE. (Check if applicable)

7-1-17 A notice of CCR availability was published.

Good faith efforts were used to reach non-bill paying consumers. Those efforts included the following recommended methods:

- 6-19-17 ✓ CCR posted on the Internet (include Internet address: www.woodsboro.org.)
- _____ CCR mailed to postal patrons (bulk mail) within the service area (attach zip codes).
- _____ Advertising availability of the CCR in news media (attach copy of announcement).
- 7-1-17 CCR published in local newspaper (attach copy).
- _____ Delivery of multiple copies to single bill addresses serving several persons, such as: apartments, businesses, and large private employers.
- _____ Delivery to community organizations (attach a list).

Public notification provided in 2016 CCR (check all that apply):

- Maximum Contaminant Level and Treatment Technique violations.
- Monitoring and reporting violations.
- CCR Delivery or Adequacy Violations are addressed in the CCR.

Mandatory for systems serving 100,000 or more persons:

- _____ CCR posted on a publicly accessible Internet site (include Internet address: _____.)
- _____ CCR delivered to other agencies or additional methods used. (Optional, attach list or description).

MDE/WMA/COM.025 (Revised 5/2017)

WATER REPORT

Annual Drinking Water Quality Report for 2016

The Town of Woodsboro, Maryland

PWSID # 0100027
May, 2017

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The sources of our drinking water are the Frederick Limestone Aquifer and the Grove Limestone Aquifer. An aquifer is a sort of underground reservoir or deposit of water, which is tapped by drilling wells and pumping the water to the surface for distribution. The earth between surface sources of contamination and this underground river helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your water distribution system. We have 5 wells varying in depth from 200 to 600 feet all located within the corporate limits of the town.

We have a source water assessment plan available from our office that provides more information such as potential sources of contamination. This plan is also available from the Frederick County Public Library or from Maryland Department of the Environment (MDE).

This report outlines the quality of our finished drinking water and what that quality means.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

If you have any questions about this report or concerning your water utility, please contact Marc Angleberger at 301-845-4288. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Mayor and Council meetings. They are held on the second Tuesday of every month beginning at 7:00 pm at the Fire Hall on Third Street.

The Town of Woodsboro routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2016, unless otherwise noted. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory 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.

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

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 - The "Goal" (MCLG) is 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Beta/photon emitters	N	10.4	pCi/l	0	50	Decay of natural and man-made deposits
Inorganic Contaminants						
Copper - Distribution (2014)	N	0.21	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead - Distribution (2014)	N	13.0	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (2016)	N	1.9	ppm	4	4	Water Additive used to control microbes
Nitrate (as Nitrogen) (2016)	N	8	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride (2015)	N	.15	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (2012)	N	.0974	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel B (2012) C (2012) D (2012)	N	0.0039 0.0042 0.0046	ppm	n/a	100	Erosion of natural deposits or leaching.
Volatile Organic Contaminants						
THM(distribution) [Total trihalomethanes] (2016)	N	12	ppb	0	80	By-product of drinking water chlorination
HAAS [Haloacetic Acids] (distribution) (2016)	N	6	ppb	0	60	By-product of drinking water chlorination

Note: Sources are as follows: B = Well # 2; C = Well # 3; D = Wells # 7, 14, & 2A; Test results are for CY 2016 unless otherwise noted. Some contaminants are not required to be tested for on an annual basis

Coliform Bacteria						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	HighPest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	Fecal Coliform or E. Coli MCL: A routine sample and repeat sample are total coliform positive and one is also fecal coliform or E. coli positive	1	N	Naturally present in the environment.

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 Woodsboro 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Nitrate [measured as Nitrogen] - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall.

Arsenic is a semi-metal element in the periodic table. It is odorless and tasteless. It enters drinking water

supplies from natural deposits in the earth or from agricultural and industrial practices. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Violation
Arsenic - Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Violation Type
MONITORING, ROUTINE
MAJOR

Violation Begin
01/01/2014

Violation End
12/31/2016

Violation Explanation
We failed to test our drinking water for arsenic during the period indicated.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring

or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.