



# Route 7 & 40 Water Quality Report for 2016

ARTESIAN WATER MARYLAND • 664 CHURCHMANS ROAD • NEWARK, DELAWARE 19702

PWSID# MD0070032

SPRING 2017

## Superior Water Quality

We are pleased to present our annual *Water Quality Report* for 2016. Each spring this report is published in accordance with the requirements of the United States Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE). The Water Quality Report describes 2016 results from our monitoring and testing data and valuable information relating to the quality of our water supply.

Artesian is committed to providing reliable and high quality water to our customers. Artesian crews work around-the-clock to monitor water quality and supply. Our treatment includes disinfection, various filtration processes, pH adjustment, and corrosion control as needed to ensure our systems are meeting all state and federal regulation. In addition to our treatment, we routinely monitor for Organics, Inorganics, Metals, Disinfection By-Products, Lead and Copper, and Radionuclides to make certain our water quality is exceeding standards.

Since 1905, Artesian has provided safe drinking water and excellent customer service to the people on the Delmarva Peninsula. We are proud to report that our water again fully complies with national and state drinking water standards.

We encourage you to take the time to review the report. If you have any questions about this report or the quality of your tap water, call us at (443) 245-7777 or (800) 332-5114. Our Customer Service Representatives and our Water Quality Department are ready to assist you.

This report is also available on our website at [www.artesianwater.com](http://www.artesianwater.com).

As always, it is our pleasure to serve you.

ARTESIAN WATER  
MARYLAND

WATER  
QUALITY  
REPORT

Information concerning  
public water system

**MD0070032**



[www.epa.gov/watersense/](http://www.epa.gov/watersense/)

## A Safe Water Source

The Route 7 & 40 public water system is supplied with water purchased from the Town of Elkton. The Town's supply comes from their groundwater wells and the Big Elk Creek, and is supplemented by purchased water from Artesian Water Company (Delaware).

The Town of Elkton's complete water quality report can be viewed at:

[www.elkton.org/sites/elktonmd/files/u96/ccr\\_final\\_04.26.17.pdf](http://www.elkton.org/sites/elktonmd/files/u96/ccr_final_04.26.17.pdf).

You may also view our Artesian Water Company (DE) water quality report at:

[www.artesianwater.com/WQR/AWC2016.pdf](http://www.artesianwater.com/WQR/AWC2016.pdf).

The Town of Elkton and Artesian Water Company (DE) both use the best available technology and conduct regular testing to ensure water quality.

Further evaluation of the state's water supply is made available by the Maryland Department of the Environment (MDE), through a program designed to assess the susceptibility of public water sources to contamination. MDE's source water assessment plan has been completed and approved by the EPA. Copies can be obtained by contacting Artesian's Water Quality Department at (443) 245-7777 or you can view copies online at the MDE's Source Water Assessment Reports website at:

[whhttp://mde.maryland.gov/programs/water/water\\_supply/Source\\_Water\\_Assessment\\_PrProgr/Pages/index.aspx](http://whhttp://mde.maryland.gov/programs/water/water_supply/Source_Water_Assessment_PrProgr/Pages/index.aspx)



# Route 7 & 40 Water Quality Report for 2016

## PUBLIC WATER SYSTEM I.D. MD0070032

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

	Unit of Measure	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Average Level Detected	Range of Level Detected	Sample Date	Violation	Likely Source of Contamination
<b>Disinfection/Disinfection By-products</b>								
Chlorine (free)	ppm	4 (MRDL)	4 (MRDLG) <sup>1</sup>	0.79	0.1 – 1.45	2016	No	Disinfectant used in drinking water industry.
Haloacetic Acids, total	ppb	60		39.08	20.80 – 56.00 <sup>2</sup>	2016	No	By-product of drinking water chlorination.
Dichloroacetic Acid	ppb	n/r		15.6	2.8 – 32.0	2016	n/a	
Trichloroacetic Acid	ppb	n/r		23.5	18.0 – 31.0	2016	n/a	
Trihalomethanes, total	ppb	80		60.13	43.1 – 95.7 <sup>2</sup>	2016	No	By-product of drinking water disinfection.
Bromodichloromethane	ppb	n/r		11.4	10.0 – 14.0	2016	n/a	
Chloroform	ppb	n/r		46.1	30.3 – 79.0	2016	n/a	
Dibromochloromethane	ppb	n/r		2.65	2.2 – 3.00	2016	n/a	

	Unit of Measure	MCL	Average Level Detected	Range of Level Detected	Sample Date	Violation?	Likely Source of Contamination
<b>Unregulated Contaminants</b>							
Alkalinity, total	ppm	n/r	42	3 – 64	2016	n/a	
Conductivity	umhos	n/r	286	205 – 412	2016	n/a	
Hardness, calcium	ppm	n/r	36	29 – 42	2016	n/a	
Phosphate, total	ppm	n/r	1.78	1.12 – 2.75	2016	n/a	Naturally occurring.

	Unit of Measure	SMCL	Average Level Detected	Range of Level Detected	Sample Date	Violation?	Likely Source of Contamination
<b>Secondary Contaminants</b>							
Iron	ppm	0.3	0.03	ND – 0.39	2016	n/a	Short-term fluctuations related to iron removal treatment.
pH, Field	0 - 14 scale	6.5 – 8.5	7.46	6.53 – 8.55	2016	n/a	Short-term fluctuations related to pH adjustments in the system.

### Unit Descriptions

- ppm — Parts per million, or milligrams per liter (mg/L)
- ppb — Parts per billion, or micrograms per liter (µg/L)
- pCi/L — Picocuries per liter (a measure of radioactivity)
- umhos — Measurement of conductivity
- n/a — Not applicable.
- ND — Not detected.
- n/r — Monitoring not required, but recommended.

### Notes

1. The U.S. Environmental Protection Agency sets the MRDLG for chlorine residual at 4 parts per million (ppm). Artesian Water strives to meet a range between 0.5 ppm and 3 ppm.
2. As part of Stage 2 Disinfection By-Product Monitoring Artesian was required to monitor one location annually. Upon detection of an elevated number, we are now required to monitor quarterly and have increased monitoring.

## Expected Substances In Drinking Water

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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:

- 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- 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 stormwater runoff, and septic systems.
- 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 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.

## If You Have A Special Health Concern

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 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 (1-800-426-4791).

## Lead In Drinking Water

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. Artesian 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 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Radon

Radon is a radioactive gas that is found in nearly all soils. It typically moves up through the ground to the air and into homes through the foundation. Drinking water from a ground water source can also add radon to the home air.

## Community Outreach and Education

People often want to learn more about their water, so Artesian is happy to provide speakers – free of charge – to community organizations, schools and other groups. Our staff of experienced employees can speak about topics such as conservation, water supply and treatment, and related subjects. We also offer our Water Conservation and Education Program to local schools! Visit our website for more information at [www.artesianwater.com](http://www.artesianwater.com).

## e-Billing

We offer a free e-billing service so you can view, print and pay your water bills online. Currently over 32,000 customers have enrolled in e-billing. If you have not enrolled yet, you can be visiting our website at: <http://www.artesianwater.com/e-billing> or contacting our Customer Service Department.



*If you have any questions about the contents of this report, please call Artesian at (443) 245-7777, toll free at 1 (800) 332-5114 or email at [custserv@artesianwater.com](mailto:custserv@artesianwater.com). Our Customer Service Representatives and Water Quality Department are ready to assist you. More information about Artesian is available at our website: [www.artesianwater.com](http://www.artesianwater.com).*

*Landlords, apartment managers, businesses, schools, etc. should share this information with others who might not receive this information directly. Consider posting the information in a public place or advise others that the report is available by contacting Artesian by phone or online at [www.artesianwater.com](http://www.artesianwater.com).*

**Artesian Water Company**  
**664 Churchmans Road**  
**Newark, DE 19702**

