

# Town of Chesapeake City Water Quality Report for 2024

TOWN OF CHESAPEAKE CITY, MARYLAND

PWSID# MD0070006

SPRING 2025

## Superior Water Quality

Artesian Water Company, the Town of Chesapeake City's water operator, is pleased to provide this Water Quality Report for the year 2024. Please notice that substances such as iron, chloride, and sodium are commonly found in drinking water. They occur naturally at trace levels, and the United States Environmental Protection Agency (EPA) has deemed that these substances pose no health hazard from consumption in drinking water. This report indicates the concentrations of these and many other substances obtained during analyses performed from January 1, 2024 – December 31, 2024 unless otherwise specified. If you have any questions about this report or the quality of your tap water, please contact the Town of Chesapeake City at (410) 885-5298.

## Town of Chesapeake City

### WATER QUALITY REPORT

Information concerning  
public water system

MD0070006



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

## A Safe Water Source

The Town of Chesapeake City water system is supplied with water purchased from the Artesian Water Company (Delaware) Main System. The system's supply comes from groundwater wells and uses the best available technology and conducts regular testing to ensure water quality.

The Artesian Water Company (Delaware) Main System's complete water quality report can be viewed at <https://www.artesianwater.com/wp-content/uploads/wqawc2024.pdf> Artesian Water Company (Delaware).

The Division of Public Health, in conjunction with the Department of Natural Resources and Environmental Control, has conducted source water assessments for nearly all community water systems in the state of Delaware. The Source Water Assessment report can be found on the Delaware SWAPP website [www.delawaresourcewater.org/assessments](http://www.delawaresourcewater.org/assessments) or contact Artesian's Water Quality Department at (800) 332-5114 to obtain a copy.

The Lead and Copper Rule, a regulation issued by the Environmental Protection Agency (EPA) in 1991, is a cornerstone of public health protection requiring water systems to control the levels of lead and copper in drinking water. EPA recently issued the new Lead and Copper Rule Improvements regulation. An initial inventory of service line pipe materials located within our service area was required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. Our initial inventory was submitted to MDE on October 15, 2024 and is available upon request.

# Town of Chesapeake City Water Quality Report for 2024

PWSID# MD0070006

The United States Environmental Protection Agency (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 during 2024. 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)	Highest 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>	1.32	0.50 – 1.32	2024	No	Disinfectant used in drinking water industry. Low levels a one-time occurrence, follow up samples showed normal levels.
Haloacetic Acids, total	ppb	60		1.85	1.85	2024	No	By-product of drinking water disinfection.
Trihalomethanes, total	ppb	80		6.3	6.3	2024	No	By-product of drinking water disinfection.

	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	86.2	60 – 148	2024	n/a	
Calcium Hardness	ppm	n/r	28	15 – 40	2024	n/a	
Conductivity	umhos/cm	n/r	166	147 – 184	2024	n/a	
Phosphate, total	ppm	n/r	0.47	0.10 – 0.77	2024	n/a	

	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 – 0.13	2024	n/a	
pH, Field	0 - 14 scale	6.5 – 8.5	7.60	7.01 – 8.20	2024	n/a	

## Unit Descriptions

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

## Notes For All Contaminants

1. The U.S. Environmental Protection Agency sets the MRDLG for chlorine residual at 4 parts per million (ppm). Artesian Water independently monitors the purchased water and strives to see a range between 0.5 ppm and 3 ppm.

## Important Drinking Water Definitions

- MCLG — MAXIMUM CONTAMINANT LEVEL GOAL:** 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.
- MCL — MAXIMUM CONTAMINANT LEVEL:** 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.
- AL — ACTION LEVEL :** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MRDLG — MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL:** the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- MRDL — MAXIMUM RESIDUAL DISINFECTANT LEVEL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- SMCL — SECONDARY MAXIMUM CONTAMINANT LEVEL:** Non-enforceable guideline which is not directly related to public health, commonly associated with cosmetic or aesthetics within the water.

## 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).

## PFAS In Drinking Water

PFAS – short for per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website:

<https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023.

The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people.

Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5.

Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

## Lead In Drinking Water

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 Water Company is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

If you are concerned about lead in your water and wish to have your water tested, contact the Town of Chesapeake City at (410) 885-5298. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at

<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 21,000 customers have enrolled in e-billing. If you have not enrolled yet, you can by visiting our website at: <http://www.artesianwater.com/e-billing> or contacting our Customer Service Department.

# Artesian Water Company Water Quality Report for 2024

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

PWSID# DE0000552

SPRING 2025

## Superior Water Quality

We are pleased to present our annual Water Quality Report for 2024. Each spring this report is published in accordance with the requirements of the United States Environmental Protection Agency (EPA) and the Delaware Division of Public Health (DPH). The Water Quality Report interprets our monitoring and testing data from 2024 and provides valuable information relating to the quality of your water. We are proud to report that the water you received from Artesian again fully complies with national and state drinking water standards.

Since 1905, Artesian has provided high quality water and superior service to customers throughout the Delmarva Peninsula. Artesian crews work around the clock to monitor water quality and supply. Our treatment process includes disinfection, various filtration processes, pH adjustment, and corrosion control as needed to ensure our water systems are meeting all state and federal regulations. In addition to treatment, we invested nearly \$290,000 in water quality monitoring and compliance testing by EPA-certified labs and experts in our internal laboratory. Artesian routinely monitors to make certain our water quality is in full compliance with all standards.

We encourage you to take the time to review this report. If you have any questions about this report or the quality of your tap water, call us at (302) 453-6930 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  
Company**

**WATER  
QUALITY  
REPORT**

Information concerning  
public water system

**DE0000552**



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

## A Safe Water Source

The Artesian Water Company public water system is supplied with water from 67 wells located throughout New Castle County. These wells are in the Columbia, Potomac, Cockeysville Marble and Mount Laurel formations. Our ground water wells use the natural filtering capability of the aquifer to remove harmful bacteria and other substances from the water. These wells are located in mostly confined aquifers that provide additional protection from surface-borne contaminants. The treatment stations in the Artesian Water Company water system use the best available technology to ensure that the water we are providing is in compliance with all Environmental Protection Agency (EPA) and State Division of Public Health water quality parameters. Regular testing also helps us ensure high quality.

In 2024, we purchased an average of 0.58 million gallons per day of surface water from the Chester Water Authority, 0.09 million gallons per day of surface water from the City of Wilmington and 0.06 million gallons of water per day from the City of New Castle Municipal Services Commission. The Chester Water Authority's supply comes from the Susquehanna River basin, while the City of Wilmington's supply comes from the Brandywine River basin. You can view the water quality report for Chester Water Authority at <https://chesterwater.com/CCR2024.pdf>. The City of Wilmington's water quality report can be found at <https://wilmingtondewater.gov/208/Water-Quality-Reports>. The City of New Castle Municipal Services Commission's water quality report can be viewed at <https://newcastlemsc.delaware.gov/files/2024/07/2024-CCR-Final-Draft.pdf>.

The Division of Public Health, in conjunction with the Department of Natural Resources and Environmental Control, has conducted source water assessments for nearly all community water systems in the state of Delaware. The assessments show that the sources are considered very low to very highly susceptible to contaminants entering the untreated water supply. The Source Water Assessment report can be found on the Delaware SWAPP website [www.delawaresourcewater.org/assessments](http://www.delawaresourcewater.org/assessments) or contact Artesian's Water Quality Department at (302) 453-6900 to obtain a copy.

# Emerging Contaminants and Proactive Treatment

Artesian takes water quality seriously. To ensure the quality of the water being provided to our customers, we take extra precautions, including proactive testing and treatment when necessary for emerging and unregulated contaminants. Artesian water comes from multiple sources and through an interconnected water system. Our rigorous testing program includes routine sampling throughout our system to ensure all treatment processes are working properly and that high-quality water is being provided to our customers.



As water quality has become an increasing priority nationwide, the regulatory landscape has evolved. For 120 years, Artesian has made delivering reliable, secure, high-quality water to customers one of our highest priorities. Advancements in technology now allow for the detection of constituents in water at very low levels, resulting in much more stringent water quality standards and requiring additional treatment before water is delivered to customers. The most notable of the newly regulated contaminants are the family of chemicals known as per- and polyfluoroalkyl substances, commonly referred to by the acronym PFAS.

Artesian has been at the forefront of addressing PFAS, having tested for it since 2013 and treating, when necessary, as part of our commitment to providing high quality water to customers. The U.S. Environmental Protection Agency announced final Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, to be fully implemented by the end of 2031, and will continue to assess potential regulations of additional PFAS compounds.

## Lead and Copper Rule



The Lead and Copper Rule (LCR), a regulation issued by the Environmental Protection Agency (EPA) in 1991, is a cornerstone of public health protection requiring water systems to control the levels of lead and copper in drinking water. EPA recently issued the new Lead and Copper Rule Improvements (LCRI) regulation. Thanks to the hard work of our employees, the company has completed the initial inventory that tracks the material of our service lines for all of our customers. For more information on the new Lead and Copper Rule Improvements, as well as information regarding your service line, please visit <https://www.artesianwater.com/education-community/lead-copper-information/>

## From Water Source to the Tap

Illustrative of our strategic plan to invest in infrastructure improvements to provide our customers with high quality and reliable drinking water, we completed six main replacement projects in 2024. In addition, we began a 2-mile major pipeline relocation and improvement project in response to a Delaware Department of Transportation upgrade along heavily traveled U.S. 40 in New Castle County, Delaware. This corridor contains a significant amount of older water pipe in a variety of sizes, making the road improvement project an excellent opportunity to replace aging mains with new, more reliable pipelines while incorporating needed hydraulic improvements. By proactively relocating and upgrading these pipelines, we will enhance system performance, improve reliability, and reduce or eliminate costly restoration efforts, all while supporting critical infrastructure improvements in the region.



# KIDS CORNER



Clean water is one of our most precious natural resources. Artesian knows how valuable water is, and how important it is for all of us to conserve now and in the future. Teaching the next generation about the water cycle and ways to conserve in your home and garden can be both educational and entertaining.





Check out the links below to access some fun facts and interactive games.

<https://drinktap.org/Kids-Place>

<https://wateruseitwisely.com/kids/>

<https://www.epa.gov/watersense/watersense-kids>



-  Pipes covered by the Internal Plumbing Protection Plan
-  Pipes covered by the Water Line Protection Plan
-  Pipes covered by the Sewer Line Protection Plan
-  Pipes covered by your utility company

## Service Line Protection Plans

We encourage all of our customers to enroll in our Water, Sewer, and Internal Plumbing Protection Plans. Nearly 25% of our customers have enrolled in the water service line protection plan and nearly 20% in the sewer line protection plan since we began offering them in 2007.

As a homeowner, you are responsible for the maintenance of the water and sewer lines that run from your house to the street, as well as all of the internal water and wastewater pipes within your home. Clogs, breaks, blockages from tree roots, and even pipe collapses can and do happen without warning. Pipes that become clogged can backup systems with raw sewage causing major inconvenience, while breaks and collapses can harm the environment and be expensive and unpleasant to clean-up.

Customers who are informed and prepared contribute to protecting water resources that we all enjoy through responsible care for pipes. **Artesian's Service Line Protection Plans** guarantee an added peace of mind of water, sewer, and internal plumbing protection that can help cover the unexpected costs of repairing and replacing internal wastewater pipes, leaking water lines, and pipe collapses to sewer lines that could cost you thousands of dollars!

### The Plans are Easy, Affordable and Convenient

- Emergency expert service repairs around-the-clock, managed by an experienced Artesian team
  - No deductible or hidden service fees
  - No negotiating with contractors or plumbers
  - Easy monthly billing added to your existing water bill

**Water Line Protection Plan** - \$6.49/month

**Sewer Line Protection Plan** - \$11.99/month

**Internal Plumbing Protection Plan** - \$13.49/month

Enroll online at: [www.artesianwater.com](http://www.artesianwater.com) Or call: 302.453.6930



# Artesian Water Company

## Water Quality Report for 2024

PWSID# DE0000552

The United States Environmental Protection Agency (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 during 2024. 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)	Highest Level Detected	Range of Level Detected	Year Sampled	Violation?	Likely Source of Contamination
<b>Inorganic Contaminants</b>								
Barium	ppm	2	2 <sup>1</sup>	0.215	nd – 0.215	2023	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	ppb	100	100 <sup>1</sup>	9	nd – 9	2023	No	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide, Free	ppm	200	200 <sup>1</sup>	11	nd – 11	2023	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
Fluoride	ppm	2	2 <sup>1</sup>	1.88	nd – 1.88	2024	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nickel	ppb	100	100 <sup>1</sup>	7	nd – 7	2023	No	Erosion of natural deposits.
Nitrate <sup>2</sup>	ppm	10	10 <sup>1</sup>	6.87	nd – 6.87	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	ppb	50	50 <sup>1</sup>	5	nd – 5	2023	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

### Volatile Organic Contaminants

Methyl-t-butyl Ether (MTBE)	ppb	10	0	0.6	nd – 0.6	2024	No	Gasoline additive.
Cis-1,2-Dichloroethylene	ppb	70	0	0.5	nd – 0.5	2024	No	Discharge from industrial chemical factories.

### Radiological Contaminants

Gross Alpha	pCi/l	15	0	5.1	nd – 5.1	2019	No	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Radium, combined	pCi/l	5	0	4.3 <sup>3</sup>	1.4 – 4.9 <sup>4</sup>	2024	No	Erosion of natural deposits.

### Disinfection/Disinfection By-Products

Chlorine (free and total)	ppm	4(MRDL)	4(MRDLG) <sup>5</sup>	3.56	nd – 3.56	2024	No	Disinfectant used in drinking water industry. Low Levels were a onetime occurrence. Follow up samples showed normal levels.
Haloacetic Acids, total	ppb	60		26.9 <sup>3</sup>	nd – 31.10 <sup>4</sup>	2024	No	By-product of drinking water chlorination.
Trihalomethanes, total	ppb	80		37.7 <sup>3</sup>	1.00 – 54.50 <sup>4</sup>	2024	No	By-product of drinking water chlorination.

	Unit of Measure	Action Level (AL)	MCLG	90th Percentile	No. of Sites Over AL	Year Sampled	Violation?	Likely Source of Contamination
<b>Lead &amp; Copper <sup>6</sup></b>								
90th Percentile Lead	ppb	15	0	1	0	2023	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
90th Percentile Copper	ppm	1.3	1.3 <sup>1</sup>	0.247	0	2023	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.



# Artesian Water Company

## Water Quality Report for 2024

PWSID# DE0000552

	Unit of Measure	Proposed MCL	MCLG	Average Level Detected	Range of Level Detected	Year Sampled	Violation?	Likely Source of Contamination
<b>Unregulated Contaminants</b>								
Alkalinity, total	ppm	n/r		82	23 – 250	2023	n/a	
Conductivity	umhos	n/r		391	71 – 822	2023	n/a	
Hardness, Calcium	ppm	n/r		73	25 – 191	2023	n/a	
Hardness, Total	ppm	n/r		113	26 – 359	2023	n/a	
PFBA <sup>8</sup>	ppt	n/r		14.6	nd – 79.1	2024	n/a	
PFPeA <sup>8</sup>	ppt	n/r		11	nd – 106	2024	n/a	
PFHxA <sup>8</sup>	ppt	n/r		4.1	nd – 72.2	2024	n/a	
PFHpA <sup>8</sup>	ppt	n/r		9	nd – 18.9	2024	n/a	
PFDoA <sup>8</sup>	ppt	n/r		nd	nd – 4	2024	n/a	
PFBS <sup>8</sup>	ppt	n/r		5	nd – 8.7	2024	n/a	
PFHxS <sup>8</sup>	ppt	n/r		4	nd – 8.9	2024	n/a	
PFOS <sup>8</sup>	ppt	n/r		nd	nd – 6	2024	n/a	
11 - Chloroicosafluoro - 3-oxaundecane - 1-sulfonic acid <sup>8</sup>	ppt	n/r		nd	nd – 0.5	2024	n/a	
PFOA <sup>7</sup>	ppt	n/r		0.24	nd – 4.28	2024	n/a	
Phosphate, total	ppm	n/r		0.91	0.08 – 4.84	2024	n/a	
Sodium	ppm	n/r		31.6	4.9 – 74.3	2024	n/a	
Total Organic Carbon (TOC)	ppm	n/r		0.31	nd – 0.76	2023	n/a	

	Unit of Measure	State SMCL	Average Level Detected	Range of Level Detected	Year Sampled	Violation?	Likely Source of Contamination
<b>Delaware Secondary Contaminants</b>							
Aluminum	ppb	50 – 200	nd	nd – 23	2023	n/a	
Chloride	ppm	250	59	nd – 164	2023	n/a	
Iron	ppm	0.3	0.04	nd – 0.47	2024	n/a	Short-term fluctuations related to iron removal treatment.
Manganese	ppm	0.05	0.029	nd – 0.065	2023	n/a	Short-term fluctuations related to manganese removal treatment.
pH, Field	0 - 14 scale	6.5 – 8.5	7.30	6.09 – 9.50	2024	n/a	Short-term fluctuations related to treatment processes.
Solids, total dissolved	ppm	500	212	38 – 409	2023	n/a	
Sulfate	ppm	250	21.1	nd – 61.3	2023	n/a	
Zinc	ppm	5	0.081	nd – 0.282	2023	n/a	

### NOTES FOR ALL CONTAMINANTS

- Although EPA sets the “goal” at the same level as the maximum contaminant level for these contaminants, Artesian Water strives to maintain levels lower than the MCL.
- 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 or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.
- Highest 4-quarter average of samples collected and used by the State Division of Public Health for compliance.
- Range includes all samples tested for, whereas highest level detected is based upon the highest 4-quarter average.
- 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.
- Under the Lead and Copper Rule, we sample for these contaminants once every 3 years
- Currently there is no MCL. EPA has issued a Health Advisory Level of 70 parts per trillion (ppt). EPA’s health advisory levels were calculated to offer a margin of protection against adverse health effects. On April 10 2024, EPA announced Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. This MCL will go into effect starting in 2029.
- This testing was performed as a part of the EPA’s 5th unregulated contaminant rule.

### Definitions of Terms

**90TH PERCENTILE** — the 90th highest reading (out of a total of 100 samples), which is used to determine compliance with the Lead and Copper Rule.

**ACTION LEVEL** — the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MAXIMUM CONTAMINANT LEVEL (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 (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.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL)** — the highest level of a disinfectant in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG)** — the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NEPHELOMETRIC TURBIDITY UNIT (NTU)** — a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**SECONDARY MAXIMUM CONTAMINANT LEVEL (SMCL)** — non-enforceable guideline which is not directly related to public health, commonly associated with cosmetic or aesthetics within the water.

**NON-DETECTS (ND)** — laboratory analysis indicates that the constituent is not present.

**NOT REGULATED (N/R)** — no MCL identified because these substances are unregulated.

**PARTS PER MILLION (PPM)** — 1 part per million corresponds to 1 minute in 2 years or a single penny in \$10,000.

**PARTS PER BILLION (PPB)** — 1 part per billion corresponds to 1 minute in 2,000 years, or a single penny in \$10,000,000.

**PARTS PER TRILLION (PPT)** — 1 part per trillion corresponds to 1 minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**PICOCURIES PER LITER (PCI/L)** — a measure of the radioactivity in water.

## 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.

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, Cryptosporidium & Giardia

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. The EPA indicates that, compared to radon entering the home through soil, radon entering the home through water will in most cases be a small source of risk. The EPA and the State of Delaware have not yet set standards for monitoring radon in drinking water, although we do expect sampling to become mandatory in the near future. Artesian Water Company is keeping a close eye on the situation and will be sure to comply with any new regulations as required.

*Cryptosporidium* and *Giardia* parasites have been known to contaminate drinking water reservoirs of surface water treatment plants. Water purchased by Artesian from the Chester Water Authority and the City of Wilmington are surface water supplies. Both have tested for these parasites and have found no problems in their treated water product.

## Monitoring Waivers

The Artesian Water Company public water system currently has a waiver for asbestos monitoring due to non-detectable results from 1995 sampling. The State of Delaware's Office of Drinking Water will be conducting new sampling to determine whether this waiver will be continued.

<b>Artesian Water Service Facts</b>	
<b>Population Served</b>	<b>approximately 301,000</b>
<b>Metered Customers</b>	<b>101,100</b>
<b>Annual Production</b>	<b>9.5 billion gallons</b>
<b>Miles of Main</b>	<b>1,491</b>
<b>Active Wells</b>	<b>220</b>
<b>Treatment Facilities</b>	<b>71</b>
<b>Storage Capacity</b>	<b>178 million gallons</b>
<b>Average Cost Per Day for Residential Water Service</b>	<b>\$1.79</b>

*If you have any questions about the contents of this report, please call Artesian at (302) 453-6930, 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

