

Scientists' Cliffs Water Association
PWSID 004-0014
Annual Drinking Water Quality Report
for CY 2024

This Annual Consumer Confidence Report contains valuable information about the quality of drinking water provided to you by the central water system that serves the Scientists' Cliffs community and is operated by the Scientists' Cliffs Association. Please read this report carefully, as it contains vital information about your community water supply. This report was designed to comply with the requirements of the Safe Drinking Water Act (SDWA) of 1996, which is administered by the United States Environmental Protection Agency and is enforced by the Maryland Department of the Environment.

If you ever have questions regarding the information supplied in this report please do not hesitate to contact Steve Dean, SCA Community Manager at 410-586-0602

All of the water supplied to you as drinking water in Scientists' Cliffs is groundwater. The groundwater was pumped from any one of our three wells. In June 2016 Well #6 (supplied from the Piney Point/Nanjemoy Aquifer) was placed into service and listed as Active with Maryland Department of the Environment.

Wells #5 and #6 pump water from the Piney Point/Nanjemoy Aquifer, which is generally located in our area at a depth of 275-400 feet. Well #4 pumps water from the Aquia Aquifer, which is generally located in our area at a depth of 500-600 feet. Both of the two aquifers that provide our water supply are confined aquifers, which means, that they are less vulnerable to contamination than a surface water source. Both the Piney Point/Nanjemoy and Aquia aquifers are well known and documented by local geologists, and are commonly used as a water supply by much of the population of Southern Maryland.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This plan is also available from Maryland Department of the Environment (MDE) or at the Calvert County Public Library. For more information call 1-800-633-6101

We are pleased to report that our drinking water is safe and meets Federal and State requirements. The following report is provided in compliance with Federal and State regulations and is provided annually. 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).

Scientists' Cliffs Association routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2024. 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:

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

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 Microgram per liter - one part per trillion corresponds to one minute in 2,000,000 years, or a single

penny in \$10,000,000,000.

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	Highest Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination	
Radioactive Contaminants							
Beta/photon emitters (average) (2020)	N	10.9	pCi/1	0	50	Decay of natural and man-made deposits	
Fluoride (average) (2023)	N	0.27	ppm	4	4	Erosion of natural deposits: water additive which promotes strong teeth: discharge from fertilizers and aluminum factories	
Barium (2022)	N	0.0253	ppm	2	2	Discharge from Drilling waste; Discharge from metal refineries; Erosion of natural deposits.	
Chromium (2022)	N	4.9	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits	
Arsenic (2024) Range Highest level detected	N	3.2–6.9 7	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	
Volatile Organic Contaminants & Disinfectants							
TTHM(distribution)(2023) [Total trihalomethanes]	N	6.9	ppb	0	80	By-product of drinking water chlorination	
HAA5 [Haloacetic Acids] (distribution)(2020)	N	1	ppb	0	60	By-product of drinking water chlorination	
Chlorine (2024)	N	0.6	ppm	4	4	Water Additive used to control microbes	
Lead and Copper	Violation Y/N	90 th Percentile	Range of Tap Sampling	Units	MCLG or MRDLG	(AL Limits) / # Sites Over	Likely Source of Contamination
Copper (distribution) 2020	N	ND (<5)	ND – 0.11	ppm	1.3	AL= 1.3 Zero (0)	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (distribution) 2020	N	1	ND – 0.0038	ppb	0	AL= 15 Zero (0)	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Test results are for 2024 unless otherwise noted; these are the most recent available results. All contaminants are not required to be tested for annually.

An initial inventory of service line pipe materials located within our service area required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. We submitted the service line inventory report by the deadline, and the "report is available upon request".

Scientist Cliffs has completed the service line inventory required by U.S. EPA's Lead and Copper Rule Revisions (initial inventory due October 16th, 2024)

For more information on our service line inventory please call 410-586-0602

Through completing a records review, it has been determined it has no Lead or Galvanized Replacement (GRR) service lines in its distribution system. This includes all system owned and customer portions of all service lines regardless of actual or intended use.

Construction records, meter replacements, and distribution maps were used to help us determine the composition of our systems service lines.

Scientist Cliffs has reviewed all applicable sources of information to complete the inventory and will continue to identify and track service line materials as they are encountered during normal operations. If, in the future, a Lead or Galvanized requiring replacement (GRR) service line is found within our system, we will prepare an updated inventory and submit to the Maryland Department of the Environment and in addition, the inventory will be made publicly available for water customers to view, and customer will be notified of any change in the service line material, if applicable.

For more information on our service line inventory please call 410-586-0602.

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. Scientist Cliffs 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 Scientist Cliffs at 410-586-0602. 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>.

While your drinking water meets EPA's standards for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low level arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems." (40 CFR 141.154(b))

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.

The Maryland Rural Water Association's State Circuit Rider assisted with the completion of this report.

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.