

Annual Drinking Water Quality Report
PHOENIX MD0030017
July 2023

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water 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. Our water source is taken from two wells in the Baltimore Gneiss, the points of withdrawal shall be located 0.3 mile northwest of the intersection of Old York Road and Paper Mill Road, 0.5 mile east of Copper Road, 1.5 mile west-northwest of Jacksonville in Baltimore County Maryland.

I'm pleased to report that our drinking water is safe and meets Federal and State requirements.

If you have any questions about this report or concerning your Water Utility, please contact **Mr. Clifton Weller at 410-887-5316, Monday thru Friday, 7:30 a.m. to 3:30 p.m.**

Phoenix Water Treatment Plant 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 1, 2022 to December 31, 2022. 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 or contaminants such as microbes, inorganic and organic chemicals 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 storm water 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 storm 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 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that 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 at 1-800-426-4791**.

In this table you will find many terms and abbreviations that you might not be familiar with. To help you better understand these terms we've provided the following for water quality test results.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

NA - not applicable

Parts per million (ppm) or Milligrams per liter (mg/L) - one part per million corresponds to one minute in 2 years or a single penny in \$10,000 - or one ounce in 7,350 gallons of water.

Parts per billion (ppb) or Micrograms per liter (ug/L) - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000 - or one ounce in 7,350,000 gallons of water.

Parts per trillion (ppt) or Nanograms per liter (ng/L) - one part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (pg/L) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or a single penny in \$10,000,000,000,000.

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

Millirems per year (mrem/yr) - measure of the radiation absorbed by the body.

Million Fibers per liter (MFL) - measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - (mandatory language) The "Action Level" is the level of concentration for a contaminant if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) The "Treatment Technique" is a required process intended to reduce the level of a contaminant in drinking water.

AVG - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Maximum Contaminant Level (MCL) - (mandatory language) The “Maximum Allowed” 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.

Level 1 Assessment - A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The “GOAL” is the level of a contaminant in drinking water is below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Level 2 Assessment - A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Residual Disinfectant Level (MRDL) - 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.

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.

SEE APPENDIX A

We constantly monitor the water supply for various contaminants. We have detected radon in the finished water supply in 1 out of 1 samples tested. There is no federal regulation for radon levels in drinking water. Exposure to air transmitted radon over a long period of time may cause adverse health effects.

We strive to do our best so that your drinking water meets or exceeds all Federal and State requirements.

We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels.

MCLs are set at very stringent levels. To understand the possible health affects 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.

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. The EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the **EPA Safe Drinking Water Hotline at 1-800-426-4791**.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

40 CFR 141.154(c) states that a system which detects nitrate at levels above 5 mg/L, but below the MCL, must include a short informational statement about the impacts of nitrate on children using language such as: 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.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

"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. **Phoenix Water Treatment Plant** 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 drinking water and wish to have your water tested, contact **Phoenix Water Treatment Plant** at **410-887-5210**. 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>

40 CFR 141.153(b)(2) states that if a source water assessment has been completed, the consumer confidence report must notify consumers of the availability of this information and the means to obtain it. MDE completed a source water assessment for Phoenix in 2001, and it can be found on MDE's website: [https://mde.maryland.gov/programs/Water/water supply/Source Water Assessment Program/Documents/www.mde.state.md.us/assets/document/watersupply/SWAPS/Baltimore/The%20Phoenix%20Water%20System.pdf](https://mde.maryland.gov/programs/Water/water%20supply/Source%20Water%20Assessment%20Program/Documents/www.mde.state.md.us/assets/document/watersupply/SWAPS/Baltimore/The%20Phoenix%20Water%20System.pdf)

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.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations from samples taken from our water system in 2022 were [2.52] parts per trillion (ppt) and [<1.0] ppt, respectively. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds.

Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: [mde.maryland.gov/Public Health/Pages/PFAS-Landing-Page.aspx](https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx)

Source Water Information

SWA = Source Water Assessment

GW =Ground Water

Location: NEAR 0.8 mile northwest of Jacksonville (approx. 2000 feet west of Old York Road)

Source Water Name		Type of Water	Report Status	Location
PHOENIX	1 BA816524	GW	YES	Jacksonville
PHOENIX	2 BA816525	GW	YES	Jacksonville

Please call our office if you have any questions.

For more information regarding this report contact:

Name Clifton Weller

Phone 410-887-5316

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

We at **Phoenix Water Treatment Plant** work around the clock to provide top quality water to every tap, said Clifton Weller. We ask that all customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Annual Drinking Water Report
Phoenix Plant Unregulated Contaminants Detected

Unregulated Contaminants

PFAS Contaminant	Units	Year	Value
PFOA	ppt	2022	2.52

**Annual Drinking Water Report
Phoenix Plant Regulated Contaminants Detected**

Appendix A

<u>Inorganic Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Barium	9/4/2020	0.04	0.04 - 0.04	2	2	ppm	No	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	9/4/2020	<0.10	0 - 1	4	4	ppm	No	Erosion of natural deposits; Discharge from fertilizer runoff and factories.
Nitrate [measured as Nitrogen]	5/3/2022	<0.10	0 - 1	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

<u>Lead and Copper</u>	<u>Sample Date</u>	<u>MCLG</u>	<u>Action Level (AL)</u>	<u>90th Percentile</u>	<u># Sites Over AL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Lead	8/12/2022	0	15	<0.002	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	8/12/2022	1.3	1.3	0.044	0	ppm	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

<u>Disinfectants and Disinfection By - Products</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source Of Contamination</u>
Chlorine	Daily 2022	1.6	0.2 - 1.6	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Haloacetic Acid 5 HAA5	6/21/2022	17	17.2 - 17.2	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	6/21/2022	45	44.7 - 44.7	No goal for the total	80	ppb	No	By-product of drinking water disinfection.

<u>Radioactive Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Alpha Gross	5/10/2022	<2 pCi/L	<2	0	15	pCi/L	No	Erosion of natural deposits.
Beta Gross	5/10/2022	9	9.0 - 9.0	0	50	pCi/L	No	Decay of natural and man made deposits.
Radium - 228	5/10/2022	<2.5 pCi/L	<2.5	0	5	pCi/L	No	Erosion of natural deposits.

<u>Volitale Organic Compounds</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Benzene	2/23/2022	ND	ND	0	0.005	ppb	No	Discharge from factories; Leaching from gas storage tanks and landfills.

Violations Table

<u>Revised Total Coliform Rule (RTCR)</u>			
The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches or other symptoms.			
<u>Violation Type</u>	<u>Violation Begin</u>	<u>Violation End</u>	<u>Violation Explanation</u>
NONE	NA	NA	NA