

# **ANNUAL WATER QUALITY REPORT**

**UPPER HALFMOON WATER COMPANY**

**2024**

# 2024 Annual Water Quality Report

Upper Halfmoon Water Company, Inc.

PWSID 4140109

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it or speak to someone who understands it well.)

We're pleased to present this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you daily. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand our efforts to continually assess and protect our essential water resources. We are committed to ensuring the quality of your water. Our water source consists of two groundwater wells. Well 5 is located on Shanelly Drive, and Well 6 is located on Towhill Road. Wells 5 and 6 are each permitted to pump at a maximum instantaneous pumping rate of 275 gallons per minute, with a 30-day average total system withdrawal limit of 206,000 gallons per day. We usually switch back and forth between Well 5 and Well 6 each pumping cycle. An emergency backup well is located on Toms Lane.

We are pleased to report that our drinking water meets all federal and state water quality requirements.

If you have any questions about this report or concerning your water utility, please contact Rick Day, President of the Upper Halfmoon Water Company (UHC), at 814-692-4309. We want our customers to be informed about their water company. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 7:00 PM either at the Halfmoon Township Municipal Building on Municipal Lane or online via Zoom. Please check our website to learn how to obtain a link to our Zoom Meetings. ([www.upperhalfmoonwater.com](http://www.upperhalfmoonwater.com))

The UHC routinely monitors your drinking water for contaminants in accordance with federal and State laws. Table 1 shows the results of our monitoring for the period of **January 1<sup>st</sup> to December 31<sup>st</sup>, 2024**. The table only shows contaminant levels that were detected in the water and does not include all potential contaminants that we monitor.

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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the Environmental Protection Agency by calling the Safe Drinking Water Hotline (800-426-4791) or visiting the website [epa.gov/safewater](http://epa.gov/safewater).

In the 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 at a detectable level.

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 1,000,000 pennies or \$10,000.

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 1,000,000,000 pennies or \$10,000,000.

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 1,000,000,000,000 pennies or \$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 one penny in 1,000,000,000,000,000 pennies or \$10,000,000,000,000.

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

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

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

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a 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 concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level(MCL)-(mandatory language) The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Contaminant Level Goal(MCLG) - (mandatory language) 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)-( mandatory language) 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)-( mandatory language) 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 contamination.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

(See table next page.)

Table 1. Test results of contaminants detected in water samples collected during 2024.

Contaminant (Unit of Measurement)	Violation Y/N	Level Detected	Range	AL or MCL in CCR units	MCLG	Major Sources in Drinking Water
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**Lead and Copper Rule** (Tested every 3 years—last tested in 2022)

Lead (ppb)	No	5.45 *	0.0-7.52	15	0	Corrosion of household plumbing.
Copper (ppm)	No	0.342	.019-.342	1.3	1.3	Corrosion of household plumbing.

\*Level Detected values are the 90<sup>th</sup> percentile number.

**Disinfection Byproducts (DBPs), Byproduct Precursors, and Distribution Disinfectant Residual**  
(Chlorine tested for weekly in Distribution) (DPB’s tested for Annually)

Chlorine (ppm) highest	No	0.96	NA	MRDL 4.0	NA	Water additive to control microbes.
Trihalomethanes	No	1.77	NA	MCL 80	NA	By-products of drinking water Chlorination

**Synthetic Organic Contaminants** (SOC’s are tested for every 3 years. Annually with previous detect)

Di (2-ethlyhexyl) phthalate (SOC)(ppb) Well 6 (EP104)	No	1.82 (2016) ND (2017- 2024)	NA	6	0	Discharge from rubber and chemical factories
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**Inorganic Contaminants** (Nitrate is tested for yearly)

Nitrate (ppm) Well 5 (EP103) Well 6 (EP104)	No No	2.15 1.91	NA	10 10	10 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
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**Radiological Contaminants** Radium 226 & 228 is tested for every 9 years. Last tested 2024 at Well 5.

Radium- 226+228(pCi/l)	No	0	NA	5	0	Erosion of natural deposits.
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**Entry Point Disinfectant Residual** (Monitored daily with continuous analyzer)

Contaminant	Minimum Disinfectant Residual Required	Lowest Level Detected	Range of Detections	Units	Violation Y/N	Source of Contamination
Chlorine (ppm) Well 5 (EP103) Well 6 (EP104)	0.40 0.40	0.60 0.41	0.60 – 1.10 0.41 – 1.00	ppm	N	Water additive used to control microbes.

Hardness: The hardness of the water from Well 5 (EP103) is 6.4 grains/gal. Sampled January 2025.  
The hardness of the water from Well 6 (EP104) is 7.6 grains/gal. Sampled January 2025.

As you can see from the table, our system had no water quality issues in 2024. However, we did have two reporting violations in July due to the PFAS lab incorrectly entering the results into the DEP system, and we didn’t catch the errors before the reporting deadline.

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than 1 year old.

MCL's are set at very stringent levels for health effects. To understand the possible health effects described for many regulated constituents, 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.

Health concerns associated with detected (or previously detected) constituents are described below.

Lead. Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The Upper Halfmoon Water Company is responsible for providing high quality drinking water and removing lead pipes, but it cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry, or washing a load of dishes. If you have a lead service line or a galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested at your own expense, contact Eric Smarkusky, UHWC Assistant Operator, at 814-206-6016 for additional information. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

Accredited independent testing for lead in drinking water can be obtained locally from Penn State's Agricultural Analytical Services Laboratory, 111 Ag Analytical Services Lab (720 Tower Rd), University Park, PA 16802 Phone: (814) 863-0841.

For more information on the presence of lead service lines in our system, please refer to the paragraph below that discusses the DEP Initial Lead Service Line Inventory.

Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the MCL over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water in excess of the MCL over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Chlorine. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Trihalomethanes. Some people who drink water containing THMs in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system, and may have an increased risk of getting cancer.

Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer. We have not detected this chemical since 2016 and expect it to be a one time occurrence due to the construction of the new well.

Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. 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.

Radium-228. Some people who drink water containing radium-226 or -228 in excess of the MCL over many years may have an increased risk of getting cancer.

In 2024, we performed mandatory initial quarterly monitoring at both well locations for the forever chemicals, commonly known as PFAS. We are happy to report that none were detected, and monitoring will now be changed to once every three years per DEP guidelines.

All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791) or on EPA's website [epa.gov/safewater](https://www.epa.gov/safewater).

The UHWC completed its required DEP Initial Lead Service Line Inventory in October 2024 with notifications being mailed to customers whose service lines were classified as Galvanized Requiring Replacement (9 homes) or Lead Status Unknown (233 homes) because the water company had not physically determined the material type of the piping on the system side of the service line. To identify possible lead service lines during this inventory, water sampling with lead analysis was performed for almost all homes built before and during 1991, when the No-Lead Rule went into effect in Pennsylvania. Analysis of the testing results suggests that none of the tested service lines contained actual lead piping. Over time, the water company plans to perform excavation or use other methods to physically verify that the piping material feeding the above homes is non-lead. Please contact Eric Smarkusky (814-206-6016) at the water company if you have any questions about the lead status of your service line.

Please call our office (814-692-4309) if you have general questions. The UHWC is committed to providing top-quality water to every customer, and we ask that all our customers help us protect our water resources.