

2024 Annual Drinking Water Quality Report



CHESAPEAKE RANCH ESTATES

Public Water System ID: MD0040004

We are pleased to present to you the Annual Water Quality Report (Consumer Confidence Report) for the year, for the period of January 1 to December 31, 2024. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. (Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien).

For more information regarding this report, contact:

Name: Warren Prince, Chief Operating Engineer

Phone: 410-326-4122

Sources of Drinking Water

CHESAPEAKE RANCH ESTATES is Ground water.

Our water source(s) and source water assessment information are listed below:

Source Name		Type of Water	Report Status	Location
BONANZA TRAIL WELL 3A CA880667	CA880667	Ground water	Y	Bonanza Tr
CLUB HOUSE DR WELL 1R CA940409	CA940409	Ground water	Y	Buena Vista Rd
GUNSMOKE TRAIL WELL 4 CA883340	CA883340	Ground water	Y	Gunsmoke Tr
WELL 2R CA190021	CA190021	Ground water	Y	Thunderbird Dr

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 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.

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 at (800) 426-4791. 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 by-products 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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).

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. **Chesapeake Ranch 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 **Chesapeake Ranch Water Company, Warren Prince**. 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>.

An initial Service Line Inventory was submitted to the Maryland Department of the Environment on October 15, 2024. As a result, the Service Line Inventory requirement was fulfilled. The report is available <https://www.cwalusby.org/recent-news>.

Source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at:

https://mde.maryland.gov/programs/Water/watersupply/Source_Water_Assessment_Program/Pages/by_county.aspx

In the tables below, 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:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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.

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 Contaminant Level or 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 or 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 goal or 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.

Maximum residual disinfectant level or 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.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

LRAA: Locational Running Annual Average

mrem: millirems per year (a measure of radiation absorbed by the body)

ppt: One part per trillion is equivalent to one nanogram (ng/L) per liter. A single drop of food coloring in 18 million gallons of water.

ppb: micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water

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

na: not applicable.

Our water system tested a minimum of 10 sample(s) per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

Disinfectant	Date	Highest RAA	Unit	Range	MRDL	MRDLG	Typical Source
CHLORINE	2023	1	ppm	-	4	4	Water additive used to control microbes

Regulated Contaminants

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Lead and Copper	Period	90TH Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low - high)	Unit	AL	Sites Over AL	Typical Source
Copper	2023	0.08 mg/l	<0.002-0339	ppm	1.3	0	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2023	>0.002 mg/L	>0.002	ppm	15	0	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	WELL 1 KOOL WATER STORAGE	2023 - 2024	1	1.4 - 1.4	ppb	60	0	By-product of drinking water disinfection
TTHM	WELL 1 KOOL WATER STORAGE	2023 - 2024	7	6.6 - 6.6	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	10/8/2024	9.95	7.4 - 9.95	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	8/1/2022	0.008	0 - 0.008	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	4/18/2022	0.39	0.32 - 0.39	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Arsenic at levels above 5 µg/l (50% of the MCL), but below the MCL.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of 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.

Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (- 226 & -228)	9/2/2020	0.4	0.1 - 0.4	pCi/L	5	0	Erosion of natural deposits
RADIUM-228	10/26/2021	0.8	0.8	PCI/L	5	0	Erosion of natural deposits

Unregulated Contaminant Monitoring Rule (UCMR)	Collection Date of HV	Highest Value (HV)	Range of Sampled Result(s)	Unit
PFOS perfluorooctanesulfonic acid	2024 final NPDWR	Non-detect	Non-detect	(MRL, µg/l) (µg/L)
PFOA perfluorooctanoic acid	2024 final NPDWR	Non-detect	Non-detect	(MRL, µg/l) (µg/L)
HFPO-DA hexafluoropropylene oxide dimer acid (GenX chemicals)	2024 final NPDWR	Non-detect	Non-detect	(MRL, µg/l) (µg/L)
PFHxS perfluorohexanesulfonic acid	2024 final NPDWR	Non-detect	Non-detect	(MRL, µg/l) (µg/L)
PFNA perfluorononanoic acid	2024 final NPDWR	Non-detect	Non-detect	(MRL, µg/l) (µg/L)
PFBS perfluorobutanesulfonic acid	2024 final NPDWR	Non-detect	Non-detect	(MRL, µg/l) (µg/L)

WHAT IS PFAS?

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) finalized regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are each 4.0 parts per trillion (ppt). The MCLs for PFNA, PFHxS, and HFPO-DA (GenX chemicals) are each 10 ppt. Additionally, a mixture of two or more of the following chemicals (PFNA, PFHxS, HFPO-DA, and PFBS) will be regulated with a Hazard Index of 1 (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.

There are no additional required health effects notices.

There are no additional required health effects violation notices.

The Board of Directors of Chesapeake Ranch Water Company meets at 6:30 p.m. on the 3rd Thursday of each month.

If you have any questions regarding this Water Quality Report, please contact the following:

Warren Prince, Chief Operating Officer
Chesapeake Ranch Water Company
P.O. Box 476
Lusby, Maryland 20657
11560 H.G. Trueman Road
Office Phone: 410-326-4122
Fax: 410-326-6743
Email: wtrhogs@gmail.com