



Chesapeake Ranch Water Company
Annual Water Quality Report
Calendar Year 2020

Annual Drinking Water Quality Report

CHESAPEAKE RANCH ESTATES

MD-040004

Annual Water Quality Report is for the period of January 1 to December 31, 2020.

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.

For more information regarding this report contact:

Name: **Warren Prince**

Phone: 410-326-4122

The Board of Directors of Chesapeake Ranch Water Company meet at 7:00 PM on the 3rd Thursday each month.

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

Source of Drinking Water:

The source of drinking water used by CHESAPEAKE RANCH WATER COMPANY USERS is deep well ground water from the Aquia Aquifer.

The Source 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.

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 call 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 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 water 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.

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.

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. We 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 <http://www.epa.gov/safewater/lead>.

Definitions:

| | |
|--|---|
| Definitions: | The following tables contain scientific terms and measures, some of which may require explanation. |
| 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. |
| Avg: | Regulatory compliance with some MCLs are based on running annual average of monthly samples. |
| ppm: | Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water. |
| ppb: | Micrograms per liter or parts per billion – or one ounce in 7,350 gallons of water. |
| na: | Not applicable |
| 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. |
| 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 bacteria have been found in our water system on multiple occasions. |
| Mrem: | Millirems per year (a measure of radiation absorbed by the body) |
| 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 allows for a margin of safety. |
| Treatment Technique or TT | A required process intended to reduce the level of a contaminant in drinking water. |
| pCi/L | Picocuries per liter of air. |

SOURCE WATER INFORMATION:

| Source Water Name | Type of Water | Report Status | Location |
|------------------------------------|---------------|---------------|--|
| BONANZA TRAIL WELL 3A CA880667 | GW | Y | NEAR 3 MI W OF LUSBY APPROX. 75 FT E OF BONANZA TRAIL |
| CLUBHOUSE DR WELL 1R CA940409 | GW | Y | LUSBY APPROX. 50 FT E OF BUENA VISTA ROAD |
| GUNSMOKE TRAIL WELL 4 CA883340 | GW | Y | NEAR 5 SE OF LUSBY APPROX. 600 FT N OF GUNSMOKE TRAIL |
| THUNDERBIRD DR WELL 2A CA811754 | GW | Y | NEAR 3 MI SE OF LUSBY APPROX. 60 FT E OF THUNDERBIRD TRAIL |

2020 Coliform Bacteria

| Maximum Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest No. of Positive | Fecal Coliform or E. Coli Maximum Contaminant Level | Total No. of Positive E. Coli or Fecal Coliform Samples | Violation | Likely Source of Contamination |
|--------------------------------|--|-------------------------|---|---|-----------|---------------------------------------|
| 0 | 0 positive monthly sample | 0 | No Detect | 0 | N | Naturally present in the environment. |

2020 Regulated Contaminants Detected

| Disinfectants and Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--|-----------------|------------------------|--------------------------|-----------------------|--------|-------|-----------|---|
| Chlorine | 2020 | 1.1 | 1.1 – 1.1 | MRDLG=4 | MRDL=4 | ppm | N | Water additive used to control microbes. |
| Total Trihalomethanes (TTHM) | 2020 | 6 | 5.5 – 5.5 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection |
| Haloacetic Acids (HAA5) | 2020 | 3 | 3.2 – 3.2 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection |

2020 Inorganic Contaminants Detected

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source |
|---|-----------------|------------------------|--------------------------|------|-----|-------|-----------|---|
| Arsenic-While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. 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 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. | 2020 | 8 | 2 - 8 | 0 | 10 | ppb | N | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| Fluoride | 2020 | 0.37 | 0.32 – 0.37 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promote strong teeth; Discharge from fertilizer and aluminum factories. |

2020 Radioactive Contaminants

| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|---|
| Beta/photon emitters | 2020 | 5.5 | 4.1 – 5.5 | 0 | 50 | pCi/L | N | Decay of natural and man-made deposits. |
| Combined Radium 226/228 | 2020 | .4 | 0.1 0.4 | 0 | 5 | pCi/L | N | Erosion of natural deposits |

Volatile Organic Contaminants

| Volatile Organic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violations | Likely Source of Contamination |
|-------------------------------|-----------------|------------------------|--------------------------|------|-----|-------|------------|--|
| Ethylbenzene | 2017 | 2.71 | 0-2.71 | 700 | 700 | ppb | N | Discharge from petroleum refineries. |
| Xylenes | 2017 | 0.01951 | 0-0.01951 | 10 | 10 | ppm | N | Discharge from petroleum factories; discharge from chemical factories. |

Lead and Copper

Definitions:

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.

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

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90 th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|------|-------------------|-----------------------------|-----------------|-------|-----------|---|
| Copper | 2020 | 1.3 | 1.3 | 0.09 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 2020 | 0 | 15 | No detect | 0 | ppb | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |

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

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