

## MERIDIAN SERVICE MD 2021 Drinking Water Quality Report Covering Data For Calendar Year 2020

*Public Water System ID:* CO0121455

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact BRADEN MCCRORY at 719-684-4761 with any questions or for public participation opportunities that may affect water quality. **Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.**

### General Information

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 (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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 resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

**Lead in Drinking Water**

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

**Source Water Assessment and Protection (SWAP)**

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [wqcdcompliance.com/ccr](http://wqcdcompliance.com/ccr). The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 121455, MERIDIAN SERVICE MD, or by contacting BRADEN MCRORY at 719-684-4761. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

**Our Water Sources**

<b><u>Sources (Water Type - Source Type)</u></b>	<b><u>Potential Source(s) of Contamination</u></b>
WELL GA-1 (Groundwater-Well) WELL GA-2 (Groundwater-Well) WELL GALV-2 (Groundwater-Well) PURCHASED FROM CO0121930 WOODMEN HILLS (Groundwater-Consecutive Connection) WELL A1 (Groundwater-Well) WELL A2 (Groundwater-Well) WELL A4 (Groundwater-Well) WELL A9 (Groundwater-Well) WELL LFH1 (Groundwater-Well) WELL LFH2 (Groundwater-Well) WELL LFH3 (Groundwater-Well) WELL LFH3 LATIGO (Groundwater-Well) WELL LFH4 (Groundwater-Well) WELL LFH9 (Groundwater-Well) WELL A6 (Groundwater-Well) WELL LFH6 (Groundwater-Well)	There is no SWAP report, please contact BRADEN MCCRORY at 719-684-4761 with questions regarding potential sources of contamination.



WELL D-3 (Groundwater-Well) WELL GLFH-1 (Groundwater-Well) WELL GLFH-2 (Groundwater-Well) WELL GALV-1 (Groundwater-Well)	
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### Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 Contaminant Level Goal (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 (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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – 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 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.



**Detected Contaminants**

MERIDIAN SERVICE MD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2020 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b> <b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <i><b>OR</b></i> If sample size is less than 40 no more than 1 sample is below 0.2 ppm <b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2020	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	10	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>
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Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	09/24/2020 to 09/24/2020	0.14	20	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2020	3	2.6 to 3.4	2	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2020	24.95	21.4 to 28.5	2	ppb	80	N/A	No	Byproduct of drinking water disinfection

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2020	1	1 to 1	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2020	1.2	1.2 to 1.2	1	pCi/L	5	0	No	Erosion of natural deposits

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2020	0.01	0.01 to 0.01	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2020	2	2 to 2	1	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2020	1.08	1.08 to 1.08	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2020	0.95	0 to 1.9	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**Volatile Organic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Ethylbenzene	2020	1.1	1.1 to 1.1	1	ppb	700	700	No	Discharge from petroleum refineries
Xylenes	2020	6.9	6.9 to 6.9	1	ppb	10,000	10,000	No	Discharge from petroleum factories; discharge from chemical factories

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2020	132.4	132.4 to 132.4	1	ppm	N/A



**Violations, Significant Deficiencies, and Formal Enforcement Actions**

No Violations or Formal Enforcement Actions

**\*\*During the 2020 calendar year, additional water was purchased through an emergency agreement between Woodmen Hills Metropolitan District and Cherokee Metropolitan District. Use of the purchased water was for a short duration, but due to Meridian Service Metropolitan District customers using the water, the Consumer Confidence Report for the other Districts will also be attached for water quality sampling results. Please contact the district office at (719) 495-6567 if additional information is needed.**



## WOODMEN HILLS MD 2021 Drinking Water Quality Report Covering Data For Calendar Year 2020

*Public Water System ID: CO0121930*

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact JERRY JACOBSON at 719-495-2500 with any questions or for public participation opportunities that may affect water quality. **Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.**

### General Information

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 (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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 resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

### Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [wqcdcompliance.com/ccr](http://wqcdcompliance.com/ccr). The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 121930, WOODMEN HILLS MD, or by contacting JERRY JACOBSON at 719-495-2500. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that *could* occur. It *does not* mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

### Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
WELL A1 (Groundwater-Well) WELL LFH1 (Groundwater-Well) WELL A2 (Groundwater-Well) WELL LFH2 (Groundwater-Well) WELL DW3 (Groundwater-Well) WELL DW1 (Groundwater-Well) WELL A3 (Groundwater-Well) WELL LFH3 (Groundwater-Well) WELL A5 (Groundwater-Well) WELL LFH5 (Groundwater-Well) WELL A6 (Groundwater-Well) WELL LFH6 (Groundwater-Well) GA1 WELL (Groundwater-Well) GLFH1 WELL (Groundwater-Well) GA2 WELL (Groundwater-Well) GLFH2 WELL (Groundwater-Well)	No potential sources of contamination identified. Please contact us for more information.



GALV1 WELL (Groundwater-Well) GALV2 WELL (Groundwater-Well) PURCHASED FROM CO0121125 CHEROKEE MD (Groundwater-Consecutive Connection)	
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### Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 Contaminant Level Goal (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 (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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – 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 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.



**Detected Contaminants**

WOODMEN HILLS MD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2020 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b> <b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <i><b>OR</b></i> If sample size is less than 40 no more than 1 sample is below 0.2 ppm <b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2020	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	12	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>
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Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	07/27/2020 to 08/04/2020	0.18	20	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2020	31.6	31.6 to 31.6	1	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2020	38	38 to 38	1	ppb	80	N/A	No	Byproduct of drinking water disinfection

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2019	1.61	0 to 3.46	4	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2017	0.93	0 to 1.4	3	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2019	0.5	0 to 2	4	ppb	30	0	No	Erosion of natural deposits

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2017	0.02	0.01 to 0.04	3	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2020	0.92	0.67 to 1.24	4	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2020	1	0 to 3.8	4	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2017	0.67	0 to 2	3	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2017	113.37	101.4 to 121.7	3	ppm	N/A

**Unregulated Contaminants\*\*\***



EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) ([epa.gov/dwucmr/national-contaminant-occurrence-database-ncod](http://epa.gov/dwucmr/national-contaminant-occurrence-database-ncod)). Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure

\*\*\*More information about the contaminants that were included in UCMR monitoring can be found at: [drinktapp.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR](http://drinktapp.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR). Learn more about the EPA UCMR at: [epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule](http://epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule) or contact the Safe Drinking Water Hotline at (800) 426-4791 or [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).



**Violations, Significant Deficiencies, and Formal Enforcement Actions**

**No Violations or Formal Enforcement Actions**

## CHEROKEE MD 2021 Drinking Water Quality Report Covering Data For Calendar Year 2020

*Public Water System ID:* CO0121125

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

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### **General Information**

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 (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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 resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



**Lead in Drinking Water**

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

**Source Water Assessment and Protection (SWAP)**

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [wqcdcompliance.com/ccr](http://wqcdcompliance.com/ccr). The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 121125, CHEROKEE MD, or by contacting BRIAN BEAUDETTE at 719-597-5080. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

**Our Water Sources**

<b><u>Sources (Water Type - Source Type)</u></b>	<b><u>Potential Source(s) of Contamination</u></b>
WELL NO 20 GOSS WELL (Groundwater-Well) WELL NO 2 (Groundwater-Well) WELL NO 17 (Groundwater-Well) WELL NO 19 DUNCAN WELL (Groundwater-Well) WELL 21 SWEETWATER 5 (Groundwater-Well) WELL AR-1 (Groundwater-Well) PURCHASED FROM CO0121150 (Surface Water-Consecutive Connection) WELL DN-4 (Groundwater-Well) WELL NO 18 TIPTON (Groundwater-Well) WELL NO 9 (Groundwater-Well) WELL NO 10 (Groundwater-Well) WELL NO 11 (Groundwater-Well) WELL NO 12 (Groundwater-Well) WELL NO 13 (Groundwater-Well) WELL NO 15 (Groundwater-Well) WELL NO 1 (Groundwater-Well)	Row Crops, Fallow, Small Grains, Pasture / Hay, Septic Systems, Road Miles

WELL NO 16 (Groundwater-Well) WELL NO 3 (Groundwater-Well) WELL NO 4 (Groundwater-Well) WELL NO 5 (Groundwater-Well) WELL NO 6 (Groundwater-Well) WELL NO 7 (Groundwater-Well) WELL NO 8 (Groundwater-Well)	
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**Terms and Abbreviations**

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 Contaminant Level Goal (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 (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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – 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 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.



**Detected Contaminants**

CHEROKEE MD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2020 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b> <b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <i><b>OR</b></i> If sample size is less than 40 no more than 1 sample is below 0.2 ppm <b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2020	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	25	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>
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Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	07/20/2020 to 07/24/2020	0.53	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/20/2020 to 07/24/2020	3	30	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

**Disinfection Byproducts Sampled in the Distribution System**

Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2020	7.73	1.6 to 12.2	10	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2020	23.87	6.5 to 31.8	10	ppb	80	N/A	No	Byproduct of drinking water disinfection

**Radionuclides Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2020	3.1	3.1 to 3.1	1	pCi/L	15	0	No	Erosion of natural deposits

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Combined Radium	2020	4.4	4.4 to 4.4	1	pCi/L	5	0	No	Erosion of natural deposits
Gross Beta Particle Activity	2019	4	0 to 8	2	pCi/L*	50	0	No	Decay of natural and man-made deposits
*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.									

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Arsenic	2020	2	1 to 3	6	ppb	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2020	0.06	0.04 to 0.08	6	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2020	3	1 to 4	6	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2020	0.87	0.36 to 1.83	3	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2020	5.66	0 to 7.1	9	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate-Nitrite	2020	4.3	0 to 6.5	3	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2020	4.67	2 to 7	6	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
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**Nitrate:** *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.

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2020	57.85	25.6 to 75.8	6	ppm	N/A
Total Dissolved Solids	2016	131.2	62 to 180	5	ppm	500

**Unregulated Contaminants\*\*\***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA’s National Contaminant Occurrence Database (NCOD) ([epa.gov/dwucmr/national-contaminant-occurrence-database-ncod](http://epa.gov/dwucmr/national-contaminant-occurrence-database-ncod)) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.



Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
<p>***More information about the contaminants that were included in UCMR monitoring can be found at: <a href="http://drinktapp.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR">drinktapp.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR</a>. Learn more about the EPA UCMR at: <a href="http://epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule">epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule</a> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <a href="http://epa.gov/ground-water-and-drinking-water">epa.gov/ground-water-and-drinking-water</a>.</p>					



**Violations, Significant Deficiencies, and Formal Enforcement Actions**

No Violations or Formal Enforcement Actions

