Annual Drinking Water Quality Report

PWSID #MT0000249
HILL COUNTY WATER DISTRICT
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Potable water is one of the most vital services provided to community residents. All of us depend on water for drinking, cooking, washing, carrying away waste, and other domestic needs. For the most part, we don't think about how drinking water gets to our homes or where that water comes from. We just want to be sure that our water is safe and keeps flowing to our taps.

The goal of Hill County Water District is to provide you with a safe and dependable supply of drinking water. Because of our commitment to ensuring the quality of your drinking water, we want to keep you informed about the activities and testing we do to ensure that your water is safe. We are pleased to present to you this year's Water Quality Report.

WATER SOURCE

The Hill County Water District gets water from an infiltration gallery running along the Marias River. We have treatment added in three places in our distribution system.

We are pleased to report that our drinking water meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Chad Hedges at (406) 397-3387.

SOURCE WATER ASSESSMENT

A Source Water Assessment was conducted in 2001. The susceptibility of our Public Water Supply wells to potential contaminant sources was assessed and susceptibility ratings for the significant potential contaminant sources and each associated contaminant are presented in the table below. Management recommendations indicate how significant potential contaminant sources could be better managed to prevent impacts to the Public Water Supply wells. The State website to view the full Source Water Assessment is: https://deq.mt.gov/water/Programs/dw-sourcewater

Table 7. Susceptibility Assessment of Significant Potential Contaminant Sources

Region	Source	Contaminant	Hazard Rating	Barriers	Susceptibility	Management Recommendations
Watershed	Express Pipeline	Crude Oil	High	Emergency planning, Residence time	Moderate	Emergency Planning
Spill Response	Cultivated Cropland	Pesticides and Nitrate	Moderate	Dilution	Moderate	Best management practices
Spill Response	Septic Systems	Microbial Contaminants	Low	None	Moderate	Growth Management
Surface Water Buffer	Cultivated Cropland	Nitrate	Moderate	Clay soils	Moderate	Best management practices
Inventory	Cultivated Cropland	Pesticides and Nitrate	Low	Clay soils	Low	Best management practices
Spill Response	Septic Systems	Nitrate	Low	Dilution	Low	Growth Management

MONITORING

Hill County Water District routinely monitors constituents in your drinking water according to Federal and State laws. The State of Montana requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some data in the tables, though representative, may be more than one year old. Our sampling frequency complies with EPA and State regulations. The table includes contaminants detected by our monitoring for the period of **January 1st to December 31st, 2025.**

In the results table and the following information, you may find terms and abbreviations with which you might not be familiar. To help you better understand these terms, we've provided the following definitions:

ppm (Parts per million): one part per million corresponds to one minute in two years or a single penny in $10,000.
ppb (Parts per billion): one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
MFL (Million Fibers per Liter): The measure of the presence of asbestos fibers that are longer than 10 micrometers.
pCi/L (Picocuries per liter): A measure of the radioactivity in water.
NTU (Nephelometric Turbidity Unit): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
N/A: Not applicable.
MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health.
MCL (Maximum Contaminant Level): The highest allowable amount of a contaminant that is allowed in drinking water.
SMCL (Secondary Maximum Contaminant Level): Non-mandatory water quality standards established as health advisory limits.
MRDLG (Maximum Residual Disinfectant Level Goal): 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.
MRDL (Maximum Residual Disinfectant Level): 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.
TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.
AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
90th Percentile Value: The concentration of lead or copper in tap water exceeded by 10 percent of the sites sampled during a monitoring period.
Secondary Maximum Contaminant Level (SMCL): SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.
Waivers: Reduction or exclusion of monitoring requirements for certain compounds. Waivers are granted by the State of Montana, based on a water system's previous monitoring history.

TEST RESULTS For Hill County Water District MT0000249

Contaminant	Violation Y/N	Sample Date	Result	Units	MCLG	MCL	Likely Source of Contamination
Chlorine	N	2025	Running Annual Average 1.90 Range detected 0.51 – 1	ppm	MRDLG 4	MRDL 4	Water additive used to control microbes
Nitrate (as Nitrogen)	N	08/11/2025	0.07	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	N	03/15/2023	0.03	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	N	03/15/2023	0.24	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel	N	03/15/2023	0.001	ppm	N/A	N/A	Natural sources as well as discharges from industrial uses
Copper	N	07/17/2024	90th Percentile Value 0.74	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	07/17/2024	90th Percentile Value 1	ppb	0	AL = 15	Corrosion of household plumbing systems, erosion of natural deposits
Haloacetic Acids (HAA)	N	08/11/2025	21	ppb	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	N	08/11/2025	53	ppb	N/A	80	By-product of drinking water disinfection
Uranium	N	03/15/2023	1.5	ppb	0	30	Erosion of natural deposits

Unregulated Contaminants

Secondary Contaminant	Violation Y/N	Sample Date	Result	Units	SMCL	MCL	Likely Source of Contamination or reason for monitoring
Manganese	N	11/07/2022	6	ppb	50	NA	Natural sources as well as discharges from industrial uses
Sulfate	N	03/15/2023	238	ppm	250	NA	Natural sources as well as discharges from industrial pollution or agricultural runoff

Bacteriological Monitoring – Our system monitors monthly for total coliform and E. coli bacteria in our water. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, we always perform special follow-up tests to determine if harmful bacteria are present in the water supply. Our monitoring for **2025** detected no presence of coliform bacteria in our water.

Chlorine – Chlorine is a water additive used to control microbes. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. We are required to monitor and record chlorine residuals daily to ensure the water being served is continually treated to make sure it is safe. These records must be forwarded to DEQ each month. All our samples in **2025** met the requirements.

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 care for an infant, you may wish to ask advice from your health care provider. Our system monitors nitrate annually. In **2025** testing, Nitrate was detected in the water system but in concentrations less than the Maximum Contamination Level set by the EPA.

Inorganic Compounds (IOCs) – The following inorganic compounds in **2023**. The heavy metals Cadmium, Chromium, Mercury, Antimony, Beryllium, Selenium, and Thallium were not detected in the water system. Barium and Fluoride were detected but in concentrations less than the Maximum Contamination Level set by the EPA. Nickel was detected in our water but the EPA currently has no Maximum Contaminant Level requirement.

Arsenic in Drinking Water – The US EPA has revised the regulations governing the amount of arsenic allowable in public drinking water supplies. Beginning January 23, 2006, the MCL for arsenic is 10 ppb and the MCLG is 0 ppb. In **2023** testing, Arsenic was not detected in the water system.

Lead and Copper – **Lead:** 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. Our system is responsible for providing high quality drinking water but 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. **Copper:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink that water contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor. In **2024** testing, Lead and Copper were detected in our water system but below the Action Levels set by the EPA.

Volatile Organic Compounds (VOCs) – VOCs are petroleum byproducts, including fuels such as gasoline and diesel; lighter fluid; fuel additives; solvents such as benzene and toluene; cleaning compounds such as dry-cleaning solution, degreasers, refrigerants and adhesives. The EPA regulates the concentration of certain VOCs in drinking water, while the EPA and the State monitor the presence of other VOCs in drinking water. The monitors annually for VOCs. Over 60 organic compounds were tested in **2023**, and none were detected in our water system.

Synthetic Organic Compounds (SOCs) – SOCs encompass a wide range of organic compounds, including pesticides and herbicides used for crops and lawns; wood preservatives; PCBs from electrical transformers; and byproducts from PVC and other plastics, including phthalates and adipates. SOCs may be released during manufacturing processes, runoff from fields where herbicides or pesticides have been used, and disposal of industrial wastes. Nearly 40 different compounds were tested in **2023**, and none were detected in our water system.

Total Trihalomethanes (TTHMs) – are a group of four chlorine and bromine-containing compounds that are formed when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. EPA regulates these compounds because they may be harmful to health at certain levels. We tested TTHMs in **2025**, and our water is considered safe at the levels detected.

Haloacetic Acids (HAA5) – are a group of chemicals that are formed when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. EPA regulates these compounds because they may be harmful to health at certain levels. We tested HAA5s in **2025**, and our water is considered safe at the levels detected.

Radionuclides – Alpha emitters are certain minerals which are radioactive, and which may emit a form of radiation known as alpha radiation. Radium-226 and Radium-228 are naturally occurring radioactive contaminants that occur primarily in ground water. We tested combined Radiums and Alpha emitters in **2017**. Gross Alpha combined Radium 226+228 were not detected in the water system.

Uranium – Uranium is a naturally occurring element found at low levels in virtually all rock, soil, and water. Significant concentrations of uranium occur in some substances such as phosphate rock deposits, and minerals such as uraninite in uranium-rich ores. Uranium can enter the body when it is inhaled or swallowed in water or food. We tested Uranium in **2023** and none was detected in the water system.

Manganese – Manganese is not a regulated contaminant and water, and soil, may naturally have manganese. When Manganese is greater than 50 ppb the water may be discolored and have a bad taste. Manganese is an essential nutrient for humans and animals at low doses, but chronic exposure to high doses may be harmful. The health effects from over-

exposure of manganese are dependent on the route of exposure, the chemical form, the age at exposure, and an individual's nutritional status. Regardless, the nervous system has been determined to be the primary target organ with neurological effects generally observed. See EPA's "Drinking Water Health Advisory for Manganese" document EPA-822-R-04-003 for more information. We tested Manganese in **2022**, and it is present in our water supply.

INTERPRETATION

The Hill County Water District constantly monitors various constituents in the water supply to meet all regulatory requirements. We are proud that our system continues to supply you with drinking water that meets or exceeds all State and Federal regulations. If you would like more information about these contaminants, you may contact EPA's Safe Drinking Water Hotline (800-426-4791).

The Hill County Water District works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

About Drinking Water….

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, 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 byproducts 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 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

MCLs are set at very stringent levels. 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.

Did you know…?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, people 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Prepared by the Department of Public Health and Human Services Environmental Laboratory (406) 444-3444