The City of Hagerman takes monthly and yearly samples to determine the presence of any contaminants. We test monthly for **Total Coliform** and **Escherichia Coli**, which is commonly referred to as **E. coli**. **E coli** and **Coliform** bacteria are present in the environment and feces of all warm-blooded animals and humans. **Coliform** bacteria are unlikely to cause illness. However, their presence in drinking water indicates that disease-causing organisms (pathogens) could be in the water system. Our yearly samples are on a set monitoring schedule by Idaho Department of Environmental Quality (IDEQ). On that schedule there are yearly samples and rotating samples that we take certain years. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently.

	Regulated Substances sampled in 2021				
Substance (Unit of Measure)	MCL (MRDL)	MCLG (MRDLG)	Amount Detected Range Low-High	Typical Source	Violation
Chlorine (ppm)	4.0	4.0	0.04 -0.44	Water additive used to control microbes.	No
Nitrate (ppm)	10	10	1.86	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.	No
Total Coliform	1>	0	ND	Naturally present in the environment.	No
Total Haloacetic acids (ppm)	0.060	NA	ND	By-product of drinking water disinfection.	No
TTHMs (Total Trihalomethanes) (ppm)	0.080	NA	0.0042	By-product of drinking water disinfection.	No
Combined Radium (226 and 228 pCi/L)	5	NA	1.18	Erosion of natural deposits	No
Combined Uranium (ug/L)	30 ug/L	NA	2.11	Erosion of natural deposits	No
Gross Alpha Activity pCi/L (includes radium and uranium)	NA	NA	ND	Erosion of natural deposits	No

This year VOCs were sampled. Below contaminants were all non-detect.1,2,4-trichlorobenzene, cis-1,2-dichloroethylene, Xylenes, Dichloromethane, 0-dichlorobenzene, p-dichlorobenzene, Vinyl chloride, 1,1-dichloroethylene, Trans-1,2-dichloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, Carbon tetrachloride, 1,2-dichloropropane, Trichloroethylene, 1,1,2-trichloroethane, tetrachloroethylene, Monochlorobenzene, Benzene, Toluene, Ethylbenzene, Styrene.

Important drinking water definitions

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

MCL: Maximum Contaminant Level: 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

MCLG: Maximum Contaminant Level Goal: 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

MNR: Monitored Not Regulated

MPL: State Assigned Maximum Permissible Level

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.

MRDLG: Maximum residual disinfection 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 contaminants.

TT: Treatment Technique: 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.

Unit Descriptions

NA: not applicable

ND: Not detected

NR: Monitoring not required, but recommended.

ppm:(parts per million) One part substance per one million parts water.

During the month of August 2021, the city didn't get the total coliform sample pulled and submitted to the lab. This created a violation for monitoring. Pulling a negative coliform sample during the month of September brought us back into compliance.

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (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: microbial contaminants, such as viruses and bacteria, that 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; and 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

What to do with unused or expired pharmaceuticals is a growing concern in a number of states including Idaho. We have begun to realize that a surplus of unused or expired pharmaceuticals can adversely impact our environment, lead to increased drug abuse, and contribute to accidental poisonings.

Our Environment: When drugs are flushed down the toilet or poured down the drain, they directly enter our environment. Medicines in wastewater currently cannot be removed by treatment plants, and they end up in our lakes, rivers, and streams. Over 80% of waterways tested in the U.S. show traces of common medications such as acetaminophen, hormones, blood pressure medicine, codeine, and antibiotics. Studies by EPA show that water bodies contaminated with medications can adversely impact aquatic life. Studies have linked hormone exposure to reproductive defects in fish, and environmental exposure to antibiotics to the development of drug-resistant germs. Fortunately, scientists have found no adverse impacts on human health to date.

Do NOT dispose of medicines in the toilet or sink. This includes any prescription or nonprescription substances intended to be swallowed, inhaled, injected, applied to the skin or eyes, or otherwise absorbed. Disposing of chemicals including pharmaceuticals down the drain adds to the exposure in our environment. Everyone can help by not contributing to this problem.

Do dispose of your unused pharmaceuticals at a household hazardous waste collection facility, if one exists in your community, or at a household hazardous waste collection event held periodically at some communities in the state. Residents in Ada County can log on to www.curbitboise.org/hhw to find locations around the county that collect pharmaceuticals. For other communities, contact your county solid waste or landfill department or city public works department to find out if a program exists in your community. If your community does not have a program, contact local officials to encourage them to sponsor a collection event.

If no collection program exists in your community, disposing of non-hazardous pharmaceuticals in the trash may be considered. Check with your pharmacy and doctor's office first, then call the landfill for suggestions. Be sure to ask whether the landfill is lined before considering this disposal option. When placing non-hazardous pharmaceuticals in the trash, be sure to do the following: •Remove unused, unneeded, or expired prescriptions from their original containers.

- •Mix them with an undesirable substance, like used coffee grounds or kitty litter.
- •Put them in impermeable, non-descript containers.
- •Hide them in your trash.

Do purchase drugs in small amounts. Buy only as much as can be reasonably used before the expiration date. For example, don't buy 500 aspirin just because it's cheaper, unless you will use them all.

Do follow your doctor's advice to take all antibiotics until the supply is exhausted. Not using all doses of an antibiotic could lead to development of antibiotic resistant strains of bacteria.

Where does my water come from?

We have two water sources that we use for our community. Our main source is a ground water spring called Big Springs. It is piped to our storage facility. The second source is a deep well. Both are pumped to an 800,000 gallon storage tank for disinfection and storage until it is needed in the distribution system.

WATER QUALITY REPORT

Water testing performed in 2021 by



CITY OF HAGERMAN

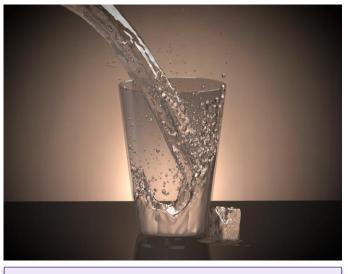
PWS ID#5240012



Why a storage tank?

Ever wonder why we still have water when the power goes out? Our storage facility is located east of town at a higher elevation. We use the storage tank and elevation to acquire our pressure in the system. For every foot of height, it provides 0.43 PSI (pounds per square inch) in the system. We also have a standby generator at our facility that we use to fill the tank in the event of a power outage.

City of Hagerman
191 State St. North
P.O. Box 158



During the summer months, the demand on our system is very high. We see times where the amount of water going to town is the same as what we are pumping in to our storage tank. Typically this happens in July and August during the hottest days. The city would like you to keep conservation in mind to help lower the demand and cost to the system. Above are a few ways to help conserve water.

Thank you,

City of Hagerman

Samples to be pulled this year are Disinfection by-product, lead and copper, Nitrate, and Di(2-ethylhexyl) Phthalate.

Do you have a Cross-Connection?

Cross-connections, which are defined as actual or potential connections between a potable water supply and a non-potable source, where it is possible for a contaminant to enter the drinking water supply. External contaminant introduction diminishes the water quality of drinking water distribution systems. Some examples are fire sprinkler systems, air conditioners, and underground sprinkler systems. Ironically, the ordinary garden hose is the most common offender as it can be easily connected to the potable water supply and used for a variety of potentially dangerous applications. A cross-connection contamination can occur when the pressure of an outside source becomes greater than the pressure in the drinking water supply system. This is known as backpressure. Contamination can also occur when the pressure in the drinking water line drops due to other occurrences such high water usage, main breaks, and fire hydrant use for flushing or firefighting use. These are known as backsiphonage. Back flow prevention devices are used to help prevent contamination from occurring. Hagerman city code 8-1-17 requires backflow prevention devices. Hagerman city code 8-1-18 goes over the conditions requiring backflow devices and requires that they be tested annually by a certified tester. If you would like more information on this, come in to city hall or EPA has a Cross-connection control manual on their website www.epa.gov/safewater/.

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
 Do not over water and allow the excess water to run down the side of the road. It costly for you to pay for and costly for us to deliver.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit <u>www.epa.gov/watersense</u> for more information.