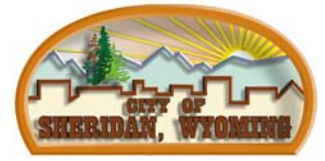


# WATER QUALITY REPORT



## CONSUMER CONFIDENCE REPORT



JANUARY 2008 - DECEMBER 2008 CITY of SHERIDAN and SHERIDAN AREA WATER SUPPLY

### Public Information Available

This report is to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. For questions about the quality of our drinking water or this report, phone Water Superintendent Tom Manolis at the Water Supply and Treatment office 674-8532, or the Utilities Division at City Hall, 674-6483 between 8:00 a.m. and 5:00 p.m.

The Sheridan City Council meets the 1<sup>st</sup> and 3<sup>rd</sup> Mondays of each month at 7:00 P.M. in the City Hall Council Chambers.

For SAWS/JPB meetings phone 672-5280.

### Special Information Available

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons - such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders - some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium are available from the EPA's Safe Drinking Water Hotline at 800-426-4791.

### Perfect Compliance

The City Water Treatment Division is proud of our perfect compliance status again in 2008.

### Maximum Contaminant Levels (MCL's)

A MCL is the maximum concentration at which a constituent may be present in order to meet water quality standards.

MCL's 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.

### Source Water Assessment

Wyoming Department of Environmental Quality has conducted a source water assessment for the City of Sheridan. This report shows where our water comes from and potential sources of contamination, which may affect our water supply. The report and map can be reviewed at City Hall.

### Source Water Supply

Sources of Sheridan's municipal water supply include surface water from rivers, streams, lakes, and reservoirs in the Big Horn National Forest's Big Goose drainage. Sheridan's water intake is located at the mouth of Big Goose Canyon. Upstream of many of the kinds of impacts listed below, which help eliminate many contaminant possibilities.

However, as water travels over the surface or through the ground it can dissolve naturally occurring minerals and, in some cases, radioactive materials. The water can also pick up substances such as:

1. Microbiological contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural operations and wildlife.
2. 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.
3. Pesticides and herbicides, which may come from agriculture, urban storm water runoff and residential uses.
4. Organic chemical contaminants, which can come from industrial processes, gas stations, urban storm water runoff and domestic uses.
5. Radioactive contaminants, which can be naturally-occurring or the results of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA establishes regulations which limit the amounts of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes limits for contaminants in bottled water.



Water is diverted from Big Goose Creek for City and SAWS customers.

## Water Quality Standards

Water supplied to Sheridan and area residents met or exceeded Safe Drinking Water Standards in 2008. The City of Sheridan reports perfect compliance with no violations of drinking water standards.

The City of Sheridan routinely monitors for constituents in your drinking water according to Federal and State laws. The table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2008. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose 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 (800-426-4791).

Parameter	Unit of Measure	Range of Detection	Level Detected	MCL	MCLG	Likely Source of Parameter
<b>Microbiological Parameters:</b>						
Total Coliform Bacteria		0 of 192 Samples positive	0. % positive	Less than 5% positive	0	Naturally present in the environment.
Fecal Coliform and E.coli			0 positive	0	0	Human and animal fecal waste.
<b>Turbidity:</b>	NTU	Met less than 0.3 ntu 100 % of time.	0.24 ntu single highest measure	<0.3ntu 95% of the time	0.0	Soil run off.
<b>Radioactive Parameters:</b>						
Beta/photon emitters	Mrem/yr		0.75	4.0	0	Decay of natural and man-made deposits.
Alpha emitters	pCi/L		ND	15.0	0	Erosion of natural deposits.
Combined radium	pCi/L		ND	5.0	0	Erosion of natural deposits.
<b>Inorganic Parameters:</b>						
Nitrate as Nitrogen	Mg/L		ND	10	0	Erosion of natural deposits and sewage.
<b>Synthetic Organics</b>	µg/l		ND	.20		Leaching from linings of water storage tanks and distribution lines.
<b>Pesticides/Herbicides</b>			ND			
<b>Volatile Organics</b>			ND			
<b>Regulated at the Customer's Tap:</b>						
Lead (The 90 <sup>th</sup> percentile was below 15, there was no exceedance).	Ppb	0 of 30 samples exceed the Action Level (15. Ppb)	5.0	15	0	Customer's plumbing and service connection.
Copper	PPM	0.03-0.33	.28	1.30	0	
<b>Regulated in the Distribution System:</b>						
Total Trihalomethanes	ppb	6.2 - 83.0	38.25	80.0 <sup>1</sup>	0	By-product of chlorination.
HAA <sub>5</sub>	ppb	11.0- 69.0	33.75	60.0 <sup>1</sup>		By-product of chlorination.
<b>Secondary Standards and Unregulated Parameters:</b>						
Color	Color units	0-19	< 1	15		
pH	Standard units	6.0-9.2	7.39	6.5 - 8.5		
Sulfate	Mg/L	0 - 33.8	3.53	250		
Total Dissolved Solids	Mg/L	28.2 – 72.0	45.0	500		
Total Hardness as CaCO <sub>3</sub>	Mg/L	5 - 48	23.2			
Total Alkalinity as CaCO <sub>3</sub>	Mg/L	8 - 53	29.1			

Listed above are contaminants detected in Sheridan's drinking water during 2008. All are below allowable levels. Not listed are other parameters for which we tested that were not detected. All test results are from the most recent monitoring and in accordance with Federal and State laws.

<sup>1</sup>These MCL's are for the Running Annual Average which we are well below.

RAA for HAA5 = 26.38 and RAA for TTHM = 22.63

**Our system had no violations.** We are proud that your drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some constituents have been detected, but all are below allowable levels. The EPA has determined that your water is safe at these levels.

### **Turbidity**

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

### **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. The City of Sheridan 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>.

### **Unregulated contaminants**

Unregulated contaminants are those that don't yet have a drinking water standard set by the USEPA.

The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. Although our sample results for Unregulated Contaminates (insecticides, flame retardants and explosives) were Non-Detect, our results are available on our web page [www.city-sheridan-wy.com](http://www.city-sheridan-wy.com)

### **Cryptosporidium & Giardia**

*Cryptosporidium* and *Giardia* are microscopic organisms that are common in surface water. *Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our 2008 monitoring results indicate the presence of these organisms in our *source* water. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

We are currently evaluating additional methods to enhance our cryptosporidium removal/inactivation processes.

#### **Definitions:**

**Maximum Contaminant Level (MCL)** -The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health.

**ppm** – one part per Million.

**ppb** - one part per billion.

**Mg/L** – one milligram per Liter.

**µg/L** - one microgram per liter.

**Nephelometric Turbidity Units (NTU)** - Measurement of turbidity in drinking water.

**Action Level (AL)** – The concentration of a contaminant that triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90<sup>th</sup> percentile for homes at greatest risk.

**mrem/yr** – Millirems per year (a measurement of radiation absorbed by the body)

**pCi/L** – Picocuries per liter is a measurement of the radioactivity in water. A picocurie is 10<sup>-12</sup> curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**SDWA** – Safe Drinking Water Act.

**ND** - Not Detected.

#### **Conservation tips:**

1. Avoid planting turf in areas that are hard to water such as steep inclines and isolated strips along sidewalks and driveways.
2. Water during the early morning hours, when temperatures are cooler, to minimize evaporation.
3. Use a layer of organic mulch around plants to reduce evaporation, promote plant growth, and reduce weeds.
4. Only water your lawn when needed. You can tell this by walking across your lawn. If you leave footprints, it's time to water.
5. Mow your lawn as infrequently as possible. Mowing puts your lawn under stress, causing it to require more water.
6. Repair all leaks.
7. Use sprinklers that throw big drops of water close to the ground. Smaller drops and mist often evaporate before they hit the ground.
8. Water only as rapidly as the soil can absorb the water.

## Water Security and You

Because utilities are often located in isolated areas, drinking water sources and wastewater collection systems may cover large areas that are difficult to secure and patrol. Residents can help by noticing and reporting any suspicious activity in and around local water utilities. Any residents interested in protecting their water resources and community can join together with law enforcement, neighborhood watch groups, and City water department. If you witness suspicious activities, report them to your local law enforcement authorities.

Examples of suspicious activity might include:

- People dumping or discharging material into a water reservoir.
- People climbing or cutting a utility fence.
- Unidentified truck or car parked or loitering near waterway or facilities for no apparent reason.

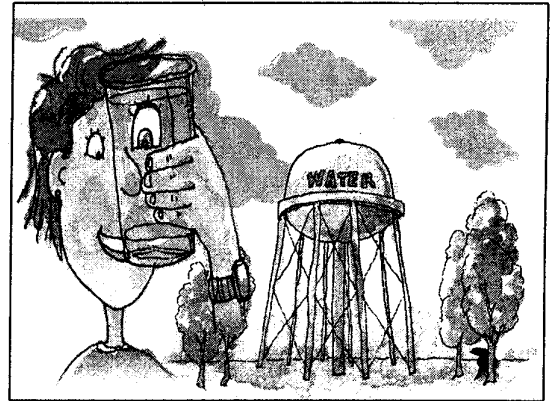
## Water Sample Collection

The Safe Drinking Water Act, administered by the USEPA requires water suppliers to monitor the water system for the quality of drinking water supplied to the public.

While many of the samples are collected at the point of entry to the system, many more are random samples collected from private residences throughout the distribution system. Water samples are collected each month throughout the year.

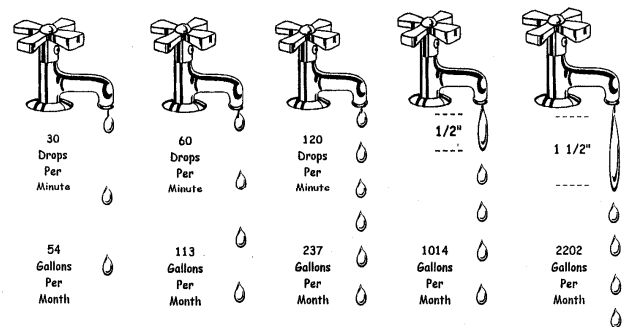
If city personnel come to your residence or place of business to collect a water sample, please ask to see their Official City ID and allow them to collect the sample. Your cooperation will make the sample collection process easier and more enjoyable for the water plant operators serving you.

- Suspicious opening or tampering with manhole covers, buildings, or equipment.
- People climbing or on top of water tanks.
- People photographing or videotaping utility facilities, structures or equipment.



**Be observant. Notice and report suspicious activity around your local water utility.**

### AVERAGE LOSS OF WATER LEAKING FAUCETS OVER A PERIOD OF ONE MONTH



Small... continuous leaks waste large amounts of water.

In addition, leaks in HOT water lines will waste heat.  
Keep all valves & faucets tight. When a leak develops, replace faucet washers.  
If valves or faucets are damaged, replace faucet or valve assembly.

City of Sheridan  
Water Treatment Division  
P.O. Box 213  
Sheridan WY 82201

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