



2021 Annual Drinking Water Quality Report Wholesale Water Customers

**For
CITY OF CASPER
200 N. DAVID STREET
CASPER, WY 82601
(307) 235-8213**

The City of Casper (City) is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services delivered to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. The City purchases wholesale water from the Central Wyoming Regional Water System (CWRWS) for your use. The water sources consist of twenty-nine ground water wells and one surface water source drawn from the North Platte River. The City continually strives to insure the quality of the water as it travels to your system through transmission and distribution lines. The City and the CWRWS are committed to ensuring the quality of your 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 can dissolve naturally occurring minerals and, in some cases, radioactive materials. The water can also pick up substances such as:

- 1) Microbial 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 waste water discharges, oil and gas production, mining or farming.
- 3) Pesticides and Herbicides, which can 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 septic systems
- 5) Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

We are pleased to report to our consumers that our drinking water is safe and meets Federal and State requirements.

If you have any questions about this report or concerning your water utility, please contact Bruce Martin, Public Utilities Manager at (307) 235-8213 or Andrew Beamer, Public Services Director at (307) 235-8341. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of the regularly scheduled meetings. The Casper Public Utilities Advisory Board **meets as needed on the fourth Wednesday of the month** at 7:00 AM at Casper City Hall, 200 N. David St., in the Downstairs Meeting Room.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	N	0.016% July & 0.016% Nov. 0% rest of months	Presence/Absence Testing	0	5% of monthly samples are positive	Naturally present in the environment
2. Fecal Coliform and <i>E. coli</i>	N	ND	Presence/Absence Testing	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
3. Turbidity Groundwater Surface Water	N	< 0.20 < 0.15	NTU	N/A	0.20 0.15	Soil Runoff
4. Cryptosporidium	N	<1	oocysts/L	N/A	2-log removal	Animal and human fecal waste
Radioactive Contaminants						
5. Beta/Photon Emitters	N/A	N/A	Mrem/yr	0	4	Decay of natural and man-made deposits
6. Alpha Emitters (Annual Average) SP01 (Surface Water) SP02 (Ground Water)	N	0.9 0.5	pCi/L	0	15	Erosion of natural deposits
7. Combined Radium SP01 (Surface Water) SP02 (Ground Water)	N	1.5 0.5	pCi/L	0	5	Erosion of natural deposits
8. Uranium	N	4	ppb/L	0	30	Erosion of natural deposits

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
18. Fluoride SP01 (Surface Water) SP02 (Ground Water)	N	0.30 0.40	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
19. Lead (Source)	N	ND	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
19A. Lead (Pb&Cu Rule) June to August 2020 (90% Value) Number of Sites Exceeding AL	N	.001 0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
20. Mercury (inorganic)	N	ND	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
21. Nitrate (as Nitrogen) SP01 (Surface Water) SP02 (Ground Water)	N	0.06 0.4	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Nitrite (as Nitrogen)	N	ND	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
23. Selenium SP01 (Surface Water) SP02 (Ground Water)	N	ND ND	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
24. Sodium SP01 (Surface Water) SP02 (Ground Water)	N	32.1 50.5	ppm	None	None	Natural occurring
25. Thallium	N	ND	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides						
26. 2,4-D	N	ND	ppb	70	70	Runoff from herbicide used on row crops
27. 2,4,5-TP (Silvex)	N	ND	ppb	50	50	Residue of banned herbicide
28. Acrylamide	N/A	N/A	ppb	0	TT	Added to water during sewage/wastewater treatment
29. Alachlor	N	ND	ppb	0	2	Runoff from herbicide used on row crops

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
50. Lindane	N	ND	Nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
51. Methoxychlor	N	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
52. Oxamyl [Vydate]	N	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Volatile Organic Contaminants						
53. PCBs [Polychlorinated biphenyls]	N	ND	Nanograms/l	0	500	Runoff from landfills; discharge of waste chemicals
54. Pentachlorophenol	N	ND	ppb	0	1	Discharge from wood preserving factories
55. Picloram	N	ND	ppb	500	500	Herbicide runoff
56. Simazine	N	ND	ppb	4	4	Herbicide runoff
57. Toxaphene	N	ND	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
58. Benzene	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
59. Carbon tetrachloride	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
60. Chlorobenzene	N	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
61. 1,2-Dichlorobenzene	N	ND	ppb	600	600	Discharge from industrial chemical factories
62. 1,4-Dichlorobenzene	N	ND	ppb	75	75	Discharge from industrial chemical factories
63. 1,2 – Dichloroethane	N	ND	ppb	0	5	Discharge from industrial chemical factories
64. 1,1 – Dichloroethylene	N	ND	ppb	7	7	Discharge from industrial chemical factories
65. cis-1,2-Dichloroethylene	N	ND	ppb	70	70	Discharge from industrial chemical factories
66. trans - 1,2 – Dichloroethylene	N	ND	ppb	100	100	Discharge from industrial chemical factories
67. Dichloromethane	N	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
68. 1,2-Dichloropropane	N	ND	ppb	0	5	Discharge from industrial chemical factories

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
81a. Bromate (SW Source Water) – Running Annual Average Highest Level Detected Range of Results	N	1.5 1.9 1.1 – 1.9	ppb	0	10 (MCL based on running annual average)	Bromate is a by-product of using Ozone as a disinfectant if Bromide is present in the source water
81b. Bromate (GW Source Water) – Running Annual Average Highest Level Detected Range of Results	N	5.8 12 3 – 12	ppb	0	10 (MCL based on running annual average)	Bromate is a by-product of using Ozone as a disinfectant if Bromide is present in the source water
82. TOC Average (Total Organic Carbon) SW Raw Water SW Finished Water % TOC Removal	N	6.3 3.0 52%	ppm	N/A	TT (Greater than 25% removal)	Naturally present in the environment
83. Chloramine Residual (Running Annual Average) Range of Results	N	1.36 0.12 - 2.28	ppm	4	4	Water additive used to control microbes

The sampling frequency for the contaminants listed in the above table complies with Environmental Protection Agency (EPA) drinking water regulations. Some of our data in the table is more than one year old, since certain chemical contaminants are monitored less than once a year.

What do the numbers in these tables mean?

As you can see by the table, our system had no MCL violations. **We're 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. The Environmental Protection Agency has determined that your water is SAFE at these levels.

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

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply and water distribution system, we need to make improvements that will benefit our customers. These improvements are reflected as water rate adjustments. Thank you for your understanding.

We, at the City, work 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.

If at any time you have concerns or any questions, please feel free to call Bruce Martin, Public Utilities Manager at (307) 235-8213 or Andrew Beamer, Public Services Director at (307) 235-8341.