



*2007 Annual Drinking Water Quality Report*

For

City of Lander

PWS WY5600176

240 S. Lincoln

Lander WY 82520

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. Lander's water sources are: (1) Surface water drawn from the Middle Fork of the Popo Agie River, filtered and disinfected at the Water Treatment Plant. (2) A small shallow well located at the water treatment plant site. This water is combined and disinfected with the plant water supply.

If you have any questions about this report or concerning your water utility, please contact **John Jones at (307) 332-4291**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **the second and fourth Tuesday of every month at 7:00 PM located at the City Hall: 240 S. Lincoln**.

**City of Lander** routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, **2007**. As water travels over the land or underground it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's 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 at 1-800-426-4791.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the laboratory does not detect the constituent.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which

a water system must follow.

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

*Maximum Contaminant Level* - (mandatory language) The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG's as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* - (mandatory language) The “Goal”(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<b>TEST RESULTS</b>						
<b>Contaminant</b>	<b>Violation Y/N</b>	<b>Level Detected</b>	<b>Unit Measurement</b>	<b>MCLG</b>	<b>MCL</b>	<b>Likely Source of Contamination</b>
<b>Microbiological Contaminants</b>						
<b>Turbidity</b> (Highest Turbidity 2007)	N	1.0	NTU	N/A	TT	Soil runoff
<b>Radioactive Contaminants</b>						
<b>Alpha emitters</b> (March 23, 2003)	N	2	pCi/1	0	15	Erosion of natural deposits
<b>Combined radium</b> (March 23, 2003)	N	0.8	pCi/1	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>						
<b>Copper</b> <b>(Pb&amp;Cu Rule/Tap Monitoring)</b> (August 1, 2006)	N	0.25	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Fluoride</b> (September 10, 2007)	N	0.1	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Lead</b> <b>(Pb&amp;Cu Rule/Tap Monitoring)</b> (August 1, 2006)	N	3	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
<b>Sodium</b> (September 10, 2007)	N	3.1	ppm	None	None	Natural occurring
<b>Volatile Organic Contaminants</b>						
<b>TTHM</b> <b>[Total trihalomethanes]</b> (September 10, 2007)	N	0.97	ppb	0	100	By-product of drinking water chlorination
<b>Disinfectants and Disinfection Byproducts</b>						
<b>TTHM</b> <b>(Total trihalomethanes)</b> Annual Average 2007	N	18	ppb	N/A	80	By-product of drinking water chlorination
<b>HAA5</b> <b>(Haloacetic Acids)</b> Annual Average 2007	N	21	ppb	N/A	60	By-product of drinking water chlorination

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Average TOC (Total Organic Carbon)</b> Highest Level Found for 2007  Range for 2007	N	2.1  ND-2.1	ppm	N/A	N/A	Natural occurring

What does this mean?

As you can see by the table, our system had no Maximum Contaminant Level 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 EPA has determined that your water IS SAFE at these levels.

In 1995, EPA issued state-wide monitoring waivers indefinitely for the following four SOCs and no monitoring is required: diquat, endothall, glyphosate, and 2,3,7,8-TCDD (dioxin). EPA also issued a state-wide monitoring waiver for asbestos except for systems whose distribution system may contain asbestos-cement pipe.

We test for a total of 76 contaminants. Those of which were undetected, are not included in the table. A list is available upon request.

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.

The sources of drinking 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 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 septic systems.
- 5) Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to insure that tap water is safe to drink, 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.

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 a half gallon 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 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) or EPA (800-227-8917).

We at the City of Lander are dedicated to providing top quality water at every tap. We ask that you help us protect our water sources, which are the heart of our community, our way of life and our children's future.