

CITY OF TROY
Montana Public Water Supply ID number 00348
2006 Water Quality Report

In a continuing effort to keep you informed about the quality of water and services we provide to you each day, we're once again pleased to provide you with our Annual Water Quality Report. This report is a snapshot of the quality of water we provided you last year. Included are details about where your water comes from, what it contains, and how it compares to EPA and State standards.

Our water comes from two wells. Well #1 is 185 feet deep. Well #2 is 57 feet deep. Our wells deliver water to the distribution system and our 125,000 gallon water tower. We currently have 564 service connections on our system and have added 9 new connections this year. In 2007 we will begin a water project to upgrade water mains, install meter pits and meters.

We are pleased to report that our drinking water is safe and meets all federal and state requirements. If you have any questions about this report or concerning your water supply, please contact David Norman at (406) 295-4151. Larry Morkeberg is our certified operator. He has ten years of experience, and attends periodic training courses to keep abreast of water service technology and regulations. The most recent training course that Larry attended was in February of 2005 and the subject was back flow prevention.

DID YOU KNOW ? The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, and wells. As water travels over the surface of land or through the ground it dissolves naturally occurring minerals and in some cases radioactive elements. Water can also pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in water include:

- 1) Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock 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 and farming.
- 3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 4) Volatile organic chemicals, which are byproducts of industrial processes, petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- 5) 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, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. We routinely monitor for constituents in your drinking water according to Federal and State laws. We take all of our water samples to Montana Environmental Laboratory in Kalispell (406-755-2131). They are a private laboratory that is certified by the State of Montana and the EPA to analyze drinking water. Our sampling frequency fully complies with EPA and State drinking water regulations. The following tests were conducted during the period of January 1, to December 31, 2006:

- 24 coliform bacteria tests - all were coliform free.
- 2 Nitrate plus Nitrite tests - results were within EPA guidelines.
- Tests on both wells to determine the possible presence twelve inorganic chemicals - results were within EPA guidelines.
- 10 Lead and Copper tests - results were well within EPA guidelines.
- Tests on both wells to determine the possible presence of 61 organic contaminants - none were detected.

The Montana Department of Environmental Quality requires that we test for asbestos in our drinking water. As our distribution system contains no asbestos cement pipe, we have applied for and been granted a monitoring waiver for asbestos. We will not have to test for this contaminant until the year 2011.

The following table shows any contaminants found in recent testing. Some of our data in the table is more than a year old, since certain chemical contaminants are monitored less than once a year.

Regulated Contaminants

CONTAMINANT	VIOLATION Y/N	SAMPLE DATE	HIGHEST LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Copper	N	9-21-06	90 th % is 0.24	ppm	1.3	AL= 1.3	Corrosion of Household plumbing / naturally occurring
Fluoride Well #1 Well #2	N	9-21-06	0.05 0.07	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Lead	N	9-21-06	90 th % is 6 One sample exceeded the AL.	ppb	0	AL= 15	Corrosion of Household plumbing / naturally occurring
Nitrate + Nitrite Well #1 Well #2	N	3-7-06	0.12 2.70	ppm	10	10	Naturally occurring at this level
Radium 228 Well #1 Well #2	N	9-25-02	2.9 +/- 1.0 1.6 +/- 1.0	pCi/L	0	5	Natural deposits

DEFINITIONS:

MCL - Maximum Contaminant Level – The “Maximum Allowed” is 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 “Goal” is 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.

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

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

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

Pci/L - Pico Curies per Liter - a very small unit of measurement of radioactivity.

What does this table tell us?

As you can see our system had no MCL violations. MCL's are set at very stringent levels. To understand the possible health effects of exceeding the MCL, a person would have to drink two liters of water every day at the MCL for a lifetime to have a one in a million chance of having any adverse health effects. Although 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.

As you can see our system had no 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. In the case of lead, on of five sampling sites in our system had levels of lead (17.6 ppb) that exceeded the action level (15 ppb). Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a certified laboratory. You can reduce the amount of lead in your drinking water by flushing your tap for 30 seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline 1-800-426-4791, or online at www.epa.gov/safewater.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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 or online at www.epa.gov/safewater. You can find out more about our system and the specific contaminants we have tested for, on the web at <http://www.deq.mt.gov/wqinfo/pws/reports.asp>.

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.

A source water assessment of our system has been conducted by the state. It is available for review at City Hall. This report provides information on the potential vulnerability of our wells to contamination. The report can be summarized in the following table:

Source	Contaminant	Hazard	Rating	Barriers	Susceptibility	Management
Municipal Sewers	Pathogens and nitrates	Leaks	High	Well grout	Moderate	Routine monitoring
Callahan Creek	Run off	Infiltration	Low	Well grout, distance to creek	Moderate	Routine monitoring
Highway & city streets	Volatile organic chemicals, synthetic organic chemicals, other chemicals	Spills	High	None	Very low	Routine monitoring
Septic systems	Pathogens and nitrates	Infiltration	Low	Distance to well	Low	Routine monitoring

Railroad	Spills	Infiltration	High	None	Very high	Emergency plan
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Our water district is committed to providing our customers with safe, pure water and we are pleased that our water meets or exceeds all established state and federal standards. Thank you for reviewing this report.

Prepared by: Montana Environmental Lab 1/07