PUBLIC NOTICE
2015 Annual Drinking Water Quality Report
City of Columbia Falls

The City of Columbia Falls is very pleased to provide the 2015 Annual Water Quality Report. The City strives to provide a safe and dependable supply of drinking water to every customer. The City's water source is two deep-water wells, one located at Clare Park(EP 507) off Talbot Road and LP Well(EP 502) located at Western Building Center off US Hwy 2 West. The City completed the source water potential contaminant inventory and susceptibility assessment and enforced the cross-connection control ordinance to protect the quality of the water. The routine monitoring of the inorganic chemicals antimony, beryllium, nickel, thallium, barium, cadmium, chromium, fluoride, mercury and selenium is on a reduced frequency by waiver from the MT Department of Environmental Quality because the results of four sampling rounds showed very low to non-detectable quantities and therefore no hazard.

The City wants to keep their valued customers informed about water utility operations. In order to maintain the City water supply system, the City Council considers both short-term and long-term improvements needed to maintain and improve the system. These improvements may require the City Council to adopt rate increases to fund the improvements. To learn more, please attend any of the regularly scheduled City Council meetings held on the first and third Monday of every month at 7:00 P.M. at City Hall Council Chambers, 130 6th St West or visit the City Website at www.cityofcolumbiafalls.org.

The City of Columbia Falls collects and tests five separate bacteriological samples each month. The City had no violations of the Total Coliform Rule occur during the monitoring period between January 1 and December 31, 2015.

The City of Columbia Falls routinely monitors for contaminants in the community drinking water according to federal and state laws. The table below shows the results of the chemical monitoring for the period of January 1 to December 31**,** 2015. Some of the data in the tables is more than one year old, since certain contaminants are monitored less than once a year. Our sampling frequency complies with Federal Environmental Protection Agency (EPA) and State drinking water regulations.

TEST RESULTS

Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Barium	**N**	05/21/2014 05/22/2014	**.13 EP507** **.20 EP502**	.13 - .20 .	ppm	2	**2**	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate + Nitrite (as Nitrogen)	**N**	11/13/2015 11/13/2015	**.44 EP507** **.60 EP502**	.44 -.60	ppm	10	**10**	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper	**N**	8/26/2015	**.14** **90th Percentile**	.01 - .25	ppm	13	**AL=1.3**	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	**N**	8/26/2015	**2.0** **90th Percentile**	0 - 4	ppb	0	**AL=15**	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride **Fluoride**	**N** **N**	05/21/2014 05/22/2014	**.05 EP507** **.04 EP502**	.04 -.05	ppm		**4**	Soil and rock
Sulfate **Sulfate**	**N** **N**	05/21/2014 05/22/2014	**3.7 EP507** **4.7 EP502**	3.7- 4.7	ppm		**250**	Soil and rock
Gross Alpha	**N**	10/26/2011	**2.7**	2.7	PCi/l	0	**15 phi/l**	Soil and rock
Radium 226 + 228	**N**	10/26/2011	**.7**	.7	PCi/l	0	**5 pCi/l**	Soil and rock

We have provided the following definitions to terms and abbreviations used in the Table above:

- **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.
- **Action Level (AL*)*** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT*)*** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **picocuries per liter (pCi/l)** – One curie is roughly the activity of 1 gram of the radium isotope 226 RA.
- **Maximum Contaminant Level** -The “Maximum Allowed” (**MCL**) is the highest level of a contaminant allowable in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal** - The “Goal” (**MCLG**) 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.

OTHER WATER PARAMETER TEST RESULTS

Parameter	*Sample Date*	*Highest level Detected*	*Range Detected*	*Unit Measurement*	*MCL*	*Significance*
Total Alkalinity	*05/22/2014*	*262*	*213-262*	*mg/l $CaCO_3$/l*	*0*	*A measure of acid-neutralizing capacity. It is the sum of all titratable bases.*
Bicarbonate Alkalinity	*05/22/2014*	*262*	*213-262*	*mg/l $CaCO_3$/l*	*0*	*Alkalinity due to bicarbonate ion, HCO_3^-.*
Carbonate Alkalinity	*05/22/2014*	*0*	*……..*	*mg/l $CaCO_3$/l*	*…….*	*Alkalinity due to carbonate ion, $CO_3^=$*
Hardness	*5/22/2014*	*276*	*220-276*	*mg/l $CaCO_3$/ grains*	*…….*	*Measure of the capacity of water to precipitate soap. It is the sum of the calcium and magnesium concentrations. When the hardness is numerically equal to or less than the sum of the carbonate and bicarbonate alkalinity, all hardness is carbonate hardness and noncarbonate hardness is absent.*
Magnesium	*05/22/2014*	*20*	*16-20*	*mg/l*	*…….*	*Important contributor to hardness. Magnesium salts break down when heated forming scale. Chemical softening reduces magnesium and associated hardness to acceptable levels.*
Manganese	*05/22/2014*	*ND*	*…….*	*mg/l*	*.05*	*Since groundwater is often anoxic, any soluble manganese is usually in the reduced state (Mn^{2+}). Upon exposure to air or other oxidants, groundwater containing manganese usually will precipitate black MnO_2. Elevated levels can cause stains in plumbing/laundry.*

What does this mean?

The City of Columbia Falls water system had no violations in 2015. The City is proud to supply drinking water that **meets or exceeds all federal and state requirements**. We have learned through the monitoring and testing that some elements have been detected. The EPA has determined that your water **IS SAFE** at these levels. All sources of drinking water are subject to potential contamination by elements that are naturally occurring or are manmade. These elements can be microbes, organic or inorganic chemicals, or radioactive material. All drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

Maximum Contamination Level(MCL)isvery stringent. To understand the possible health effects described for many regulated elements, 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.

Nitrates: As a precaution the City will always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. Potential sources of lead in the household should be identified and removed if possible.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. Lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. If you are concerned about elevated lead levels in your

home's water, flush your tap for 30 seconds to 2 minutes before using tap water. You may also have your water tested for lead. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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.

Due to the concern of possible contamination of area ground water from the Columbia Falls Aluminum Plant site, the City elected to have a full range of tests completed in May 2014.There was no evidence of contamination in the City's wells: Aluminum, Cyanide,Mercury, Manganese, and Vanadium were all Non Detect. The Zinc and Fluoride levels were well below the Maximum Contaminant Levels set by the EPA and are consistent with past results. The full analytical report is on the City's web sitewww.cityofcolumbiafalls.org or upon request. The City has continued routine monitoring of the wells with no instances of contamination as reported above. CFAC has continued their regular on-site monitoring and are now beginning the EPA-required site analysis that includes groundwater, air and soil testing.

In 2015, the City completed water system upgrade projects in various parts of the City, replacing old 1" and 2" lines with 6" and 8" PVC, creating loops in the system that were previously dead end lines. Fire hydrants and control valves were also added in these areas of the City improving water and fire flow.

This Annual Drinking Water Quality Report **will not be mailed** out to individual water customers. If you have any questions about this report or the City's Water Utility, please contact Grady Jenkins, Public Works Director at (406) 892-4430 or email: jenkinsg@cityofcolumbiafalls.com. This report is available on the City website, posted at City Hall or upon request.