

# 2015 WATER QUALITY REPORT

## FOR

### City of Denver

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Copper (ppm)	1.3	AL=1.3	0.814 ppm	07/22/2015	0.0220 mg/l- .829 mg/l based upon 10 samples collected.	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	0	AL=15	1.14	07/22/2015	ND – 6.72 ppb based upon 10 samples collected	No	Corrosion of household plumbing systems; erosion of natural deposits
TTHM (mg/L) [Total trihalomethanes]	N/A	0.080	<0.0020	08/05/2015	In distribution system	No	By-products of drinking water chlorination
Chlorine (ppm)	MRDLG = 4.0	MRDL= 4.0	1.2	01/01/2015 - 12/31/2015	.81 ppm to 1.75 ppm	No	Water additive used to control microbes
Total Coliform Bacteria	0	Presence coliform bacteria in >5% Monthly samples	2 samples positive	07/10/2013 11/20/2013	In distribution system	No	Naturally present in the environment
Barium (ppm)	2	2	.222 ppm .0446 ppm	04/17/2013 04/17/2013	In Well #3 In Well #4	No No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A N/A	N/A N/A	12.9 ppm 29.8 ppm	04/17/2013 04/17/2013	In Well #3 In Well #4	No No	Erosion of natural deposits; Added to water during treatment process
Fluoride (ppm)	4 4	4 4	.164 ppm 1.12 ppm	04/17/2013 04/17/2015	In Well #3 In Well #4	No No	Water additive which promotes strong teeth; Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate [as N] (ppm)	10 10	10 10	.596 mg/l <0.100 mg/l	2015 2015	In Well #3 In Well #4	No No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Combined radium (pCi/L)	0 0	5 5	1.55 pCi/L 3.2 pCi/L	06/28/2010 02/18/2015	In Well #3 In Well #4	No No	Erosion of natural deposits
Alpha emitters (pCi/L)	0	15	1.85 +/- 1.53 pCi/L 10.1 pCi/L	03/09/2010 02/18/2015	In Well #3 In Well #4	No No	Erosion of natural deposits
Haloacetic Acids (HAA5) (mg/L)	N/A	0.060	<0.006 mg/L	08/05/2015	In distribution system	No	By-products of drinking water disinfection

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

#### 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. MCLGs allow for a margin of safety.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

## **GENERAL INFORMATION**

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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791).

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 Denver 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 Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## **SOURCE WATER ASSESSMENT INFORMATION**

The Denver water supply obtains its water from two wells drilled in two different aquifers. Well #3 is drilled to a depth of 191 feet into the limestone of the Silurian-Devonian aquifer. The Silurian-Devonian aquifer was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials provide some protection from contaminants from the land surface. The Silurian-Devonian well will be susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. Well #4 is drilled to a depth of 1060 feet into the Jordan Sandstone or better known as the Cambrian-Ordovician aquifer. The majority of the water used is from Well #4, Well #3 is used primarily as back-up for high flow needs.

## **CONTACT INFORMATION**

For questions regarding this information, please contact City Hall at (319)984-5642 during the following hours: 7:30 a.m. – 4:30 p.m.

Decisions regarding the water system are made at the City Council meetings held on the first and third Monday of the month at 7p.m. at City Hall and are open to the public.