

The water professionals at Brigham City work around the clock to provide the highest quality water possible to every tap.

**We are pleased to report that your drinking water meets or exceeds all federal and state standards.**

## Be Involved

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. If you have any questions about this report or concerning your water utility, please contact Public Works at (435) 734-6615. 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 City Council meetings, 20 North Main. They are held on the first and third Thursday's of each month at 7:00 pm.

## Source Protection Plan

The Drinking Water Source Protection Plan for Brigham City is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our water sources have been determined to be from groundwater. Our water sources are Cemetery Well # 1, Cemetery Well #2, Intermountain Well, Cooley Well, Flat Bottom Canyon Well, Mantua East Well, Mantua West Well, Peter Jensen Well, Canyon View Well, Beecher Spring, Birch Spring, Rock Spring, Peter Jensen Spring, Olsen Spring, East Hailing Spring, and West Hailing Spring.

Our sources are located in remote and protected areas and have a low level of susceptibility to potential contamination sources. We have also developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

## Aquifer Storage and Recovery Program

- In 2016 our Springs produced 2,538,841,000 gallons of water
- In 2016 our Wells produced 479,126,908 gallons of water
- In 2016 we injected 478,861,000 gallons of water back into the aquifer through our Aquifer Storage and Recovery Program
- In 2016 our average chlorine residual was 0.42 parts per million
- In 2016 our average fluoride residual was 0.70 parts per million

Making Life Better

Brigham City  
2016 Water Quality Report

20 North Main Brigham City, UT 84302

Office Hours: 8:00am - 5:00 pm Phone: 435-734-6615 [www.brighamcity.utah.gov](http://www.brighamcity.utah.gov)

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. Should there be a concern for your safety, we will contact you with and let you know the appropriate action to take to continue to have safe drinking water.

Contaminant	Violation Y/N	+ Sample Count		MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>TCR TABLES</b>							
Coliform Bacteria	N	0		0	5	2016	Naturally present in the environment
Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>RADIOACTIVE CONTAMINANTS</b>							
Alpha Emitters	N	-1 - 2.1	pCi/L	0	15	2013, 2014, 2016	Erosion of natural deposits
Radium 228	N	-0.02-0.44	pCi/L	0	5	2013, 2014, 2016	Erosion of natural deposits
<b>TURBIDITY</b>							
Turbidity	N	0.09-1.1	NTU	0	0.30	2013, 2014, 2016	Soil Runoff
<b>INORGANIC CONTAMINANTS</b>							
Arsenic	N	0.5 - 1	ppb	0	10	2013, 2014, 2016	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	34 - 72	ppb	2000	2000	2013-2016	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	N	0 - 700	ppb	4000	4000	2013, 2014, 2016	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	N	0 - 1100	ppb	10,000	10,000	2014, 2016	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	0-1.1	ppb	50	50	2014, 2016	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	7.9 - 57.1	ppm	500	none	2013-2016	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mine
Sulfate	N	8 - 30	ppm	1000	1000	2013, 2014, 2016	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from croplan
Total Dissolved Solids (TDS)	N	88 - 348	ppm	2000	2000	2013, 2014, 2016	Erosion of natural deposit
<b>LEAD AND COPPER</b>							
Lead	N	0 - 10.9	ppb	0	AL=15	2016	Corrosion of household plumbing systems, erosion of natural deposits
Copper	N	57 - 250	ppb	1300	AL=1300	2016	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

# Test Results

# January 1 - December 31, 2016

## Table Definitions

In the table to the left, 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:

**ND/Low - High** - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents on one table instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded on the same space in the report table

**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 (ug/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**(nanograms/l)** one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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

**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.

**Date**- Because of required sampling time frames. i.e., yearly. 3 years. 4 years and 6 years. sampling dates may seem outdated.



In addition to the constituents listed to the above, we also tested for over 65 others.

*None were detected.*

As you can see by the table, 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. The EPA has determined that your water is SAFE at these levels

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, further information is located on the City's website @ [www.brighamcity.utah.gov](http://www.brighamcity.utah.gov).

# Cross Connection



## Water Contamination?!? *Should I be worried?!*

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.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 from their health care providers about drinking water. 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).

Brigham City Corporation - 20 North Main - Brigham City, UT 84302

Office Hours: 8:00am - 5:00 pm

Phone: 435-734-6615

[www.brighamcity.utah.gov](http://www.brighamcity.utah.gov)

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

# Lead Awareness