

## Dear Ivins City Resident,

We are pleased to present to you this year's 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.

In addition to our vested water rights, we purchase water from the City of St. George and the Washington County Water Conservancy District. Sources include the Snow Canyon wells, Gunlock wells, and the Quail Creek water treatment plant.

A Drinking Water Source Protection Plan was completed to identify any potential sources of contamination to our water supply. The plan determined that the City has a low susceptible level to potential contamination because of the remote location of our water source. The plan is available for review by our customers at our office.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements to our water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Ivins City and our suppliers routinely monitor for contaminants in our drinking water in accordance with Federal and State laws. **All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants.** All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or are man made. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

**MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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. 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 at 1-800-426-4791.

There are many connections to our water distribution system. When connections are properly installed and maintained, 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 home. 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 a 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, call us for further information about ways you can help.

Following are 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 constituent is not present.

**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 contaminants in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in 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.

**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 (AL)** - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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.

**Maximum Contaminant Level (MCL)** - 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 (MCLG)** - 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.

The following table shows the results of monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2012.

<b>WATER ANALYSIS FOR YEAR 2012</b>							
Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Total Coliform Bacteria	N	ND	Positive or Negative	0	< 5%	Monthly	Naturally present in the environment
Turbidity	N	0 – 0.3	NTU	N/A	5	2012	Soil runoff
<b>Radioactive Contaminants</b>							
Gross Alpha	N	1 - 6	pCi/L	0	15	2011	Erosion of natural deposits
Gross Beta	N	ND - 12	pCi/L	0	50	2011	Erosion of natural deposits
Radium 226	N	ND - 1	pCi/L	0	5	2011	Erosion of natural deposits
Radium 228	N	ND - 1	pCi/L	0	5	2011	Erosion of natural deposits
Radon 222	N/A	ND - 249	pCi/L	N/A	N/A	2011	Naturally occurring gas in groundwater

<b>Inorganic Contaminants</b>							
Arsenic	N	ND - 10	ppb	0	10	2012	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	ND - 320	ppb	2,000	2,000	2011	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	N	ND - 700	ppb	4000	4000	2011	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	0.1 - 0.7	ppm	10	10	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	ND - 11	ppb	50	50	2012	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	ND - 58	ppm	N/A	N/A	2012	Erosion of natural deposits; discharge from refineries & factories; runoff from landfills
Sulfate	N	ND - 290	ppm	1,000	1,000	2012	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Total Dissolved Solids	N	93 - 660	ppm	2,000	2,000	2012	Erosion of natural deposits
<b>Lead and Copper Results from Household Taps</b>							
Contaminant		90 <sup>th</sup> Percentile					
Lead	N	2.4	ppb	0	AL = 15	2012	Corrosion of household plumbing; erosion of natural deposits
Copper	N	171	ppb	1,300	AL = 1,300	2012	Corrosion of household plumbing; erosion of natural deposits
<b>Disinfection Byproducts</b>							
HAA's	N	3.3 - 6.3	ppb	0	60	2012	Disinfection byproduct
TTHM's	N	29.8 - 36.7	ppb	0	80	2012	Disinfection byproduct

As you can see by the table, your drinking water meets or exceeds all Federal and State requirements. We have learned through monitoring and testing that some contaminants have been detected, however, **the EPA has determined that your water IS SAFE at these levels.**

**Water Hardness:** Many customers use treatment devices, such as water softeners, to remove water hardness causing minerals like calcium and magnesium to produce soft water. Most customers with water softeners will find that settings between **13 and 22 grains per gallon** will provide the most effective treatment.

Ivins City personnel work very hard to provide quality water to every residence. We ask that all our customers help us protect and conserve our water sources, which are the heart of our community. If you have any questions about this report or concerning your water utility, please contact us at 435-634-0689. We want our valued customers to be informed about their water utility. Please feel free to visit our website at [ivins.com](http://ivins.com) or attend any of our regularly scheduled City Council meetings that are held on the first and third Thursday of every month beginning at 5:30 pm.



*Ivins City*  
*2011 Water Quality Report*

***IMPORTANT INFORMATION ABOUT  
YOUR DRINKING WATER***

*As a resident, you have received this report even  
if you do not receive your drinking water from Ivins City*