

## Where can I have my water tested?

Contact your Local Health Departments for certified labs in your area.

<http://www.drinkingwater.utah.gov/partners>

Check USU Extension's web page for a list of drinking water certified labs throughout Utah.

<http://extension.usu.edu/waterquality/htm/homeownerswater>

## How do I take a water sample?

Contact the lab **BEFORE** taking the samples to make sure you use proper containers and procedures.

The lab you contact will provide bottles and instructions for each type of test.

*A poorly collected sample is worse than no sample at all, because you don't get reliable results and you waste your money!*

## What do I do with the results?

- Compare your results with the drinking water standards on the lab report.
- If any values exceed the standards, **DO NOT DRINK THE WATER!**
- Identify and remove the source of pollutants. Retest!

## For Help with Interpretation...

Use the Water Quality Extension Interpretation Tool:

<http://extension.usu.edu/waterquality/htm/wqtool>

USU Water Quality Interpretation Tool

Welcome to the Utah State University water quality interpretation toolkit. This tool has been created to help you evaluate the water quality of your drinking water, irrigation water, livestock water, and environmental water.

Please click on the type of water you have sampled and would like to evaluate.

Water will be used for...

Drinking Water  Irrigation Water  Livestock Water  Aquatic life or recreation

**Bacteria**

E. Coli  colonies/ 100ml

Fecal Coliforms  colonies/ 100ml

Total Coliforms  colonies/ 100ml

**Pesticides and Volatile Organic Contaminants**

1,1,1-Trichloroethane  ug/l

1,1,2-Trichloroethane  ug/l

1,1-Dichloroethylene  mg/l

1,2,4-Trichlorobenzene  ug/l

1,2-Dichloroethane  mg/l

**Inorganics and Physical Properties**

Utah does not regulate private drinking wells. These standards listed below are used to regulate drinking water for municipalities, but are provided to help you interpret results from your private well.

**Table of results:**

**Beneficial Use Designation—Primary Drinking Standards:** Exceeding primary standards may cause health problems.

Test Name	Criterion	Lab Result	Status	Explanation of results
Arsenic (As)	0.01 mg/l Maximum	< 0.02 mg/l	Failed	Studies have linked long-term exposure to arsenic in drinking water to cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate. Non-carcinogenic effects of arsenic include cardiovascular, pulmonary, immunological, neurological, and endocrine effects. Short-term exposure to high doses of arsenic can cause other detrimental health effects. For many years the maximum contaminant level set by the US EPA for arsenic was 0.050 mg/liter. Based on studies conducted in the 1990s on the long term exposure to arsenic in drinking water, a new standard of 0.010 mg/liter was set. This will become effective for all public water systems by January 23, 2006. For more information on arsenic in drinking water, please go to the following website: • <a href="http://www.epa.gov">http://www.epa.gov</a>
Nitrate (NO3-N)	10 mg/l Maximum	< 12 mg/l	Failed	Make sure that your results are entered as nitrate-nitrogen (NO3-N) and not as nitrate ion (NO2-). In the case of a non-community water systems which exceed the MCL for

For more information on drinking water testing and protecting your well from pollutants, contact USU Extension's water quality program (435-797-2580) or visit our web page:

[www.extension.usu.edu/waterquality](http://www.extension.usu.edu/waterquality)



## Testing Your Well Water

If your drinking water comes from a private well, it is up to you to assure that your water is safe.

Learn the warning signs of polluted drinking water, and how to get your water tested.



Water is Life: Quality Matters

## If you think you have a contamination problem, what to test for...

### When do I test my well?

#### New Wells or New Homes:

Test for bacteria and a routine general water chemistry analysis (check our web page or a commercial lab for the complete list).

#### Existing wells:

##### Every year:

Test for bacteria pH, nitrate and total dissolved solids (TDS).

Also...test for any constituents that were at or near the drinking water standard in previous tests.

##### Every five years:

Have a routine water chemistry analysis performed.

**Keep copies of ALL results so you can track changes in your water quality over time.**

You Suspect Contamination due to Illness or other concerns	Test For:
Recurring gastro-intestinal illness	Coliform bacteria
Objectionable taste or smell	Hydrogen sulfide, corrosion, metals
Water appears cloudy, frothy, or colored	Color, detergents
You are pregnant, are planning a pregnancy, or have an infant less than six months old	Nitrates, lead
Possible Contamination From Your House	Test For:
Household plumbing contains lead	Lead, copper, pH
Radon in indoor air or region is radon rich	Radon
Corrosion of pipes, plumbing	Corrosion, pH, lead
Stained plumbing fixtures, laundry	Iron, copper, manganese
Scaly residues, soaps don't lather	Hardness
Rapid wear of water treatment equipment	Corrosion, pH
Water softener needed to treat hardness	Manganese, iron
Possible Outside Contamination of Your Well	Test For:
Your well does not meet construction codes	Coliform bacteria, total dissolved solids, nitrates
The area around the wellhead has been flooded or submerged	Coliform bacteria, total dissolved solids
Back-siphoning has occurred	Coliform bacteria, total dissolved solids, nitrates
You have mixed or used pesticides near the well, or have spilled pesticides or fuel near the well	Pesticides, volatile organic compounds
You have a heating oil tank or underground fuel tank near the well that you know has leaked	Volatile organic compounds
Your septic system absorption field, or your neighbor's, is close to the well (within 100 feet)	Coliform bacteria
Nearby areas of intensive agriculture	Nitrate, pesticides, coliform bacteria
Coal or other mining operations nearby	Metals, pH, corrosion
Gas drilling operations nearby	Chloride, sodium, barium, strontium
Landfill, factory, or gas station nearby	Volatile organic compounds, total dissolved solids, pH, sulfate, chloride, metals
Odor of gasoline or fuel oil, and near gas station or buried fuel tanks	Volatile organic compounds
Salty taste and seawater, or a heavily salted roadway nearby	Chloride, total dissolved solids, sodium