

Testing Your Well Water



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If your home water comes from a public water supply, it has been tested and meets EPA standards for drinking water. If you use a private well, however, you are responsible for assuring that the water is safe to drink. This means that you should periodically have your water tested, make sure your well is in proper condition without faulty well caps or seals, and identify and remove potential sources of contamination to your well such as leaking septic systems or surface contamination.

This factsheet provides some information on testing schedules, warning signs, and information on taking a sample and finding a lab.

Establish a Routine Water Testing Schedule for Your Well

Test the Water of New Wells or New Homes:

- For bacteria,
- Request a routine general water chemistry panel analysis.

Test the Water of Your Existing Well:

Every Year:

- Test for bacteria,
- Test for pH, nitrates, and total dissolved solids (TDS),
- Test for any constituents that were at or near the drinking water standard in previous tests.

Every Five Years:

- Have a complete water chemistry analysis performed.

Note: Always keep copies of ALL results so you can track changes in your water quality over time.



Drinking Water Facts.....

Reasons to Test Your Water

- Your well does not meet construction codes,
- The area around the wellhead has been flooded or submerged,
- Back-siphoning has occurred,
- You have mixed or used pesticides near the well, or have spilled pesticides or fuel near the well,
- You have a heating oil tank or underground fuel tank near the well that you know has leaked,
- You are pregnant, are planning a pregnancy, or have an infant less than six months old,
- Your septic system absorption field, or your neighbor's, is close to the well (within 100 feet).

Other Reasons to Test Your Water

Conditions or Nearby Activities	Test For:
Recurring gastro-intestinal illness	Coliform bacteria
Household plumbing contains lead	Lead, copper, pH
Radon in indoor air or region is radon rich	Radon
Corrosion of pipes, plumbing	Corrosion, pH, lead
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
Objectionable taste or smell	Hydrogen sulfide, corrosion, metals
Stained plumbing fixtures, laundry	Iron, copper, manganese
Salty taste and seawater, or a heavily salted roadway nearby	Chloride, total dissolved solids, sodium
Scaly residues, soaps don't lather	Hardness
Rapid wear of water treatment equipment	Corrosion, pH
Water softener needed to treat hardness	Manganese, iron
Water appears cloudy, frothy, or colored	Color, detergents

Where can I have my water tested?

- Make sure lab is certified for drinking water analysis.
- Check with lab before you do the test to make sure you have all the necessary information.
- For information on laboratories in Utah, contact USU Extension's Water Quality Program (435-797-2580) or visit the web page: www.extension.usu.edu/waterquality

How do I take a water sample?

- First, call the lab for sample containers and procedures.
- Use the appropriate container for the type of sample.
- Store the sample carefully according to instructions before taking it to the lab.

How do I take a water sample for bacteria?

- First, call the lab for sample containers and procedures.
- Never rinse out the sample container, as it is sterile and contains a preservative.
- Samples must be kept cool and delivered to the lab within a short period of time (often less than 24 hours) or they will not be analyzed.

A poorly collected sample is worse than no sample at all... and wastes your money!

- Ask about costs and turnaround time.

What do the results mean?

- Compare your lab report to the drinking water standards.
- If any values exceed the standards, DO NOT DRINK THE WATER!
- Retest if bacteria, nitrate, or organic parameters exceed the standards.
- If concentrations are increasing between samples, try to determine and mitigate the source of pollutants.

For more information, contact Water Quality Extension at 435-797-2580 or visit the web page at:
www.extension.usu.edu/waterquality