

Potential Contaminants

Conduct Regular Tests For:

Total Coliform Bacteria	Every Year
pH Levels	Every 3 Years
Total Dissolved Solids	Every 3 Years

Tests for Specific Problems:

<u>Symptom</u>	<u>Test For</u>
Gastro-intestinal illness	Coliform bacteria
Cloudy or colored water	Detergents
Orange or black stains	Iron, manganese
Soap has no lather; white residue	Hardness
Water tastes salty	Chloride, sodium, TDS*
Odor of gas or fuel	VOCs**
Pin hole leaks, blue stains	pH, copper, lead

Tests for Nearby Land Uses of Concern:

<u>Nearby Landuse</u>	<u>Test For</u>
Agricultural operations	Nitrate, coliform, bacteria, pesticides
Coal mining	pH, iron, manganese
Gas drilling	Sodium, chloride, barium
Dump, landfill, factory	Metals, VOCs**
Heavily salted roadways	Sodium, chloride, TDS*

** VOC = Volatile Organic Compound

* TDS = Total Dissolved Solids



WHAT DO MY TEST RESULTS MEAN?

The results of your water test will tell you the level of each of the tested substances were found in your water supply.

Comparing your results to federal EPA drinking water standards for public water systems will help you to determine if water problems are present. While the presence of some contaminants may be hazardous to your health, many may just be a nuisance.

For additional information on safe drinking water standards, specific contaminants and caring for your well, please visit our website at:

www.wellwater.vt.edu/resources.php

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Ten Tips for

Managing Your Private Well Water Supply



Ensure the safety of your water supply and the health of your family by following these simple guidelines.

Your Guide to Safe Well Water

- ✓ 1) **Inspect your well annually** for any cracks, holes, or corrosion. Ensure well cap is secure.
- ✓ 2) Have your well **tested once a year** for total coliform bacteria, which will give an indication of whether there is a likelihood of more dangerous bacteria present. Every three years test for pH, TDS, nitrate, and other contaminants of local concern.
- ✓ 3) All water tests should be **conducted by a certified lab**. After you receive your results, compare them to the drinking water standards for public systems by the EPA, which serve as good guidelines for private systems.
- ✓ 4) Keep the area around **your well clean and accessible**. Make sure it is free of debris, paint, motor oil, pesticides, and fertilizers. **Do not dump waste near your well** or near sink-holes, as this may contaminate your water supply.

- ✓ 5) Your well should be **100 feet away from potential contaminants** sources such as chemical storage facilities, oil tanks or septic tanks. If you have a septic tank, have it pumped regularly.
- ✓ 6) The ground should **slope away from your well** to prevent surface water from pooling around the casing, which can cause contamination and damage your system.
- ✓ 7) Make sure your well is **properly constructed**. Well casing should be high enough (12") so that surface water can never enter your well. You should also have a **sealed sanitary cap or sturdy concrete cover (on a bored well)** to prevent contamination from insects, small mammals, and other surface contamination.



Ensure that a drilled well has a sealed sanitary well cap (right). If you have a bored well, the concrete cover should be tight and secure (left). Well caps and casing should be free of cracks, holes and corrosion.

- ✓ 8) If you have a spring, make sure the **spring box is sealed to prevent contamination**. Springs are very susceptible to contamination, so be sure to test your spring every year for coliform bacteria.
- ✓ 9) **Keep careful records** of your well installation, any maintenance or inspections, repairs, and all water tests.
- ✓ 10) **Have your well inspected every 10 years by a professional with a WWP (water well and pump) classification**. When abandoning a well, have it properly decommissioned by a local water well professional to avoid contaminating nearby wells.



Maintaining your well is essential to protecting your family's health. Preventive maintenance is often much less costly in the long run.