What do my test results mean?

The results of your water quality test will tell you the level of each of the tested substances that 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, others may just be a nuisance.

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

www.wellwater.bse.vt.edu/resources.php

Tests for nearby land uses of concern

<table>
<thead>
<tr>
<th>Nearby landuse</th>
<th>Test for</th>
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</thead>
<tbody>
<tr>
<td>Agricultural operations</td>
<td>Nitrate, coliform bacteria, pesticides</td>
</tr>
<tr>
<td>Coal mining</td>
<td>pH, iron, manganese</td>
</tr>
<tr>
<td>Gas drilling</td>
<td>Sodium, chloride, barium</td>
</tr>
<tr>
<td>Dump, landfill, factory</td>
<td>Metals, VOCs**, Sodium, chloride, TDS*</td>
</tr>
</tbody>
</table>

TDS* = Total dissolved solids
VOC** = Volatile organic compound
Make sure your well is properly constructed. Well casing should be 12” above ground, with a sanitary, sealed well cap or secure concrete cover to prevent contamination from insects and surface water. Unsure about your well construction? Visit www.wellwater.bse.vt.edu/wellcheck for more information.

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.

Ensure your well is at least 100 feet away from potential contamination sources, such as chemical storage, oil tanks, and septic tanks. If you have a septic tank, have it pumped regularly.

Keep the area around your well clean and accessible. Make sure the area is free of debris, paint, motor oil, pesticides and fertilizers. Do not dump waste near your well or near sinkholes, as this may contaminate your water supply.

Have your water tested once a year for total coliform bacteria, which will give an indication whether there is a likelihood of more dangerous bacteria present that could potentially cause illness. Every three years, test for pH, total dissolved solids (TDS), nitrate, and other contaminants of local concern.

All water tests should be conducted by a certified lab. After you receive the results, compare them to the drinking water standards for public systems by the EPA, which serve as good guidelines for private systems.

Inspect your well annually for any cracks, holes, or corrosion. Ensure your well cap is secure. Every 3 years, or if you suspect a problem, have your well inspected by a licensed well drilling contractor with a Water Well and Pump (WWP) classification. For a list of contractors who provide well inspections, visit wellwater.bse.vt.edu/wellcheck.

Keep careful records of your well installation, maintenance, inspections, and all water tests.

If a well on your property is no longer in use, have it properly abandoned by a licensed well contractor. Wells that are left unsealed or improperly abandoned can serve as a direct pathway for surface water to enter the groundwater supply, causing contamination. Remember: groundwater is a shared resource!

If you have a spring instead of a well, 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. Continuous treatment for bacteria is often required to ensure spring water is safe to drink.