

WHY TEST YOUR WATER?

Water is the universal solvent; almost all natural and man-made chemicals can dissolve in and contaminate water. This is dangerous because your well water starts as rain or snow that percolates into the ground and is then delivered to your home through your well. Water can be contaminated anywhere in its journey from rain to your home. If you have a private well, water quality testing is important for you and your family. Contaminants in drinking water have been linked to cancer and toxicity, posing a risk to human health. Many of these contaminants have no taste, odor, or color. Their presence **can only** be determined by laboratory testing. The Environmental Protection Agency (EPA) recommends that all homeowners with private wells test their drinking water every year.

CONTAMINATION of WELLS

As mentioned before, water can dissolve materials that are present on or in the ground, thus becoming contaminated. Some contaminants are naturally occurring. These include bacteria, radon, arsenic, uranium, and other minerals. Other contaminants find their way onto the land from human activities. On a large scale, industrial/commercial activities, improper waste disposal, road salting, agricultural use, and fuel spills can introduce hazardous materials to the ground. However, even typical residential activities, such as the application of fertilizers and pesticides/PCBs, fueling of lawn equipment, and disposal of household chemicals can contaminate the groundwater when done improperly. Even an on-site septic system can pose a threat to your well. That is why taking measures to protect your well from contamination is so important.

WHEN TO TEST YOUR WELL

The EPA and Health Departments require testing of all wells that supply water to apartments, restaurants, multiple homes, etc. The testing of these wells is usually required at least every three months. As a private homeowner you are not under the regulations of Health Departments, but your well water supply is subject to the same problems and contaminants that affect larger supplies. **The EPA recommends that you test your water at least once a year.** The following is a prudent water-testing schedule:

FREQUENCY OF TESTING

<u>Test/Profile</u>	<u>Frequency</u>
<i>Basic</i>	<i>Every Year</i>
<i>Standard</i>	<i>Every 3 years</i>
<i>Extensive</i>	<i>Every 5 years</i>
<i>Comprehensive</i>	<i>Initially, then every 5 years</i>

Contamination can occur at any time. The above list is only a guideline. Some indications that you should test your well water before using it for consumption include: recent work done on the well or plumbing, area flooding, or changes in quality such as taste, cloudiness, odor, or color.

WHAT OUR PROFILES TEST FOR

The following list of Water Profile Tests provides you with choices from comprehensive testing to basic screening of a well's water quality. These tests identify some of the common natural and man-made contaminants found in well water. *It is recommended that a Certified Sample Technician collect these samples.*

BASIC PROFILE

Total Coliform Bacteria
Nitrate, Nitrite, Sodium, Iron,
Manganese, Hardness, Turbidity,
Sulfate, Color, Odor, and pH

STANDARD PROFILE

Basic Profile plus
Volatile Organic Compounds [over sixty organic contaminants including compounds found in gasoline (MtBE), organic solvents, and many others].

EXTENSIVE PROFILE

Standard Profile plus
Herbicides, Pesticides, and PCB's.

COMPREHENSIVE PROFILE

Extensive Profile plus Heavy Metals (Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, and Mercury), Fluoride, and Radon.

• ADDITIONAL TESTS

Circumstances relative to your well may require additional testing not described here. Please call us with any questions you may have at **1-800-932-1150**.

Explanation of Profiles

• BASIC PROFILE

This analysis covers the most common contaminants. Contaminants such as bacteria and Nitrates/Nitrites can pose health-related concerns, while others only affect aesthetics (color, odor, and staining).

• STANDARD PROFILE

This analysis covers the **BASIC Plus Volatile Organic Compounds (VOCs)**. The most common VOCs come from gasoline compounds (such as MtBE and benzene) and industrial solvents (such as TCE). These are common near landfills, dumps, industrial parks, factories, gas stations, car washes, etc... MtBE can be found in well water even in remote areas.

• **EXTENSIVE PROFILE**

This analysis covers the **STANDARD** Profile plus **Herbicides and Pesticides/PCBs**. Most Herbicides and Pesticides/PCBs are used around industrial areas, agricultural areas, orchards, golf courses, and even home lawn treatments. Local environmental conditions (soil types, seasonal snow, and rainfall) have a major affect on these contaminants.

• **COMPREHENSIVE PROFILE**

This analysis covers the **EXTENSIVE** profile plus **Heavy Metals** (Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury), which are found in soil and underground rocks. Blasting and construction can increase the presence of these metals in drinking water. *Lead and Copper* can be found in home plumbing systems as well. **Fluoride** - excessive consumption of naturally occurring fluoride can damage bone tissue and stain teeth, especially in children. **Radon** – a gas that is a natural product of the breakdown of uranium in the soil can pose an increased threat of Cancer.

RESULTS FROM YOUR TESTING

Results will show the level of contamination of the chemicals tested. These levels are compared to the safe levels as determined by Public Health Agencies. When levels exceed state or federal standards, you can take steps to correct the situation.

PROTECT YOUR FAMILY...

For more information call: **800-334-0103** or Visit us at: www.premierlaboratory.com

What Contaminants can do

Source	Problem	Effect
Septic contamination, animal waste & fertilizer	Coliform bacteria, nitrates	Recurring gastro-intestinal illness
Household plumbing with lead pipes or solder	pH, lead, copper	Brain Damage, illness
Radon in bedrock or ground water	Radon gas	Cancer
Corrosion of plumbing	pH, lead, copper	Brain Damage, illness, leaks and staining
Nearby areas used for agriculture, golf courses, or orchards	Nitrates, herbicides, pesticides, bacteria, phosphates	Cancer, liver, kidney, central nervous system problems ,gastro-intestinal illness
Nearby blasting or construction operations	Metals, pH	Cancer, liver, kidney, central nervous system
Dumps, landfill, factory, gas station, dry-cleaner, or buried fuel-tank	(VOC's), pH, sulfate, chloride, metals	Cancer, liver, kidney, central nervous system illness
Objectionable taste, smell or sewage	Sulfides, bacteria, or metals	Gastro-intestinal illness
Stained plumbing fixtures, laundry	Metals, iron, copper, manganese	Gastro-intestinal illness, brain damage
Nearby seawater, heavily salted roadway, or salty taste	Chloride, total dissolved solids, sodium	High blood pressure
Scaly residue, soaps don't lather	Hardness	Staining, scaling of tub & sink
Water softener needed to treat hardness	Manganese, iron	Staining of tub, sink, & laundry
Water appears cloudy, frothy, or colored	Color, detergents	Staining of tub & sink

IS YOUR WATER SAFE?

BE SURE.

Premier Laboratory's Guide to Water Quality Testing.



61 Louisa Viens Drive, Dayville, CT 06241

800-334-0103

www.premierlaboratory.com

Certified Throughout New England

