

What you should know when considering well water testing

Testing of well water provides important information regarding the safety and quality of the water. The two most commonly requested tests are ***bacteriological*** and ***inorganic chemical***.

Bacteriological testing determines if well water is free of potentially harmful bacteria. This test checks for the presence of two types of bacteria, **Total Coliform** and **E. Coli**. It is important to remember that “pure” water does not exist – all, natural water contains some gases and minerals and it is likely to contain some microbial organisms. Most water bacteria are harmless. Many sources of bacterial water pollution include runoff from woodlands, pastures, and feedlots; septic tanks and sewage plants; and animals (wild or domestic).

Inorganic Chemical testing is generally requested when there are water quality concerns, including color, taste, and smell. Chemical testing is also an important first step when a well owner is considering a treatment system. This test checks for amounts of the following:

Arsenic – Barium – Cadmium – Calcium – Chloride – Chromium – Copper – Fluoride – Iron – Lead – Magnesium – Manganese – Mercury – Nitrate – Nitrite – pH – Selenium – Silver – Sodium – Sulfate – Total Alkalinity – Total Hardness – Zinc

Some or all of the listed chemicals may be present in any water sample, but each one has an “allowable limit”, which is stated on the Certificate of Analysis that is returned to you when you request inorganic chemistry testing of your well water.

****The Bacteriological testing and the Inorganic Chemical testing are both included in the ‘Full Panel’ test that is listed on our application. This is our most popular test.**

Other, less commonly conducted types of water tests are ***organic chemical*** and ***petroleum***.

Organic Chemical testing checks for the presence of pesticides. Routine testing for pesticides and herbicides associated with home lawn care and gardening and commercial agriculture is expensive, and may not be needed unless your home is located in an area with known problems. However, such testing might be warranted if significant amounts of pesticide have been applied near the well, or have been detected in a neighboring well. This test detects the following:

Hexachlorocyclopentadiene – Propachlor – Trifluralin – Hexachlorobenzene – Lindane – Heptachlor – Aldrin – Heptachlor epoxide – Dieldrin – Endrin – Methoxychlor – Chlordane – Toxaphene.

Petroleum testing is a test used to determine if a well is contaminated with fuel oils or like substances, including chemical compounds that originally came from crude oil. This test is ordinarily conducted only if there has been a spill or leak in the area or if it has been detected in a nearby water source.



General Information

All samples are collected by Person County Health Department staff and sent to the State Laboratory of Public Health for analysis. Samples are generally collected within a week of being requested, and only on Monday through Wednesday. The State Laboratory usually provide *bacteriological* test results within a week. Other types of water test results are usually provided in 3 to 4 weeks.

If water sample results are time sensitive, private laboratories may be able to offer a quicker turnaround time. A list of certified private certified laboratories can be found at:

<https://slphreporting.ncpublichealth.com/Certification/CertifiedLaboratory.asp>