



NEW MEXICO ENVIRONMENT DEPARTMENT - GROUND WATER QUALITY BUREAU

www.nmenv.state.nm.us 1-800-219-6157

WELL TEST FORM



How to take a water sample:

- 1. Collect the sample before any water treatment system, such as reverse osmosis, water softener, or carbon filter.
2. Turn on the tap and let the cold water run for at least five minutes.
3. Collect at least one quart of water in a clean glass container, such as a canning jar.
4. Old samples can give inaccurate results. Collect the sample as close to the time of testing as possible and write down the date and time you took the sample.

WELL INFORMATION (1-15 to be completed by well owner or user) use ball-point pen and PRESS HARD

Form with 15 numbered sections for well information, including name, phone number, mailing address, physical address, age of well, usage, depth, casing material, and water quality concerns.

Test Results

Drinking Water Standard

Table with 2 columns: Test Results and Drinking Water Standard. Rows include pH, Temperature, Specific Conductance, Sulfate, Nitrate as nitrogen, Fluoride, and Iron.

* National Secondary Drinking Water Standard (Aesthetic) ** National Primary Drinking Water Standard

See the back of this form for additional information on test results

Notice - The tests performed by NMED are only for those chemicals or characteristics listed on this form. The tests are not a substitute for a complete laboratory analysis, nor do they include tests for bacteria or other organisms. In addition, if a dirty sample container was used, or if the sample was collected more than 24 hours prior to analysis, the test results may be inaccurate. If you have any questions, please ask an NMED representative.

INTERPRETING YOUR TEST RESULTS

pH - The pH indicates whether water is basic, neutral or acidic. It is a measure of hydrogen ion activity in water and it is measured on a scale from 0 to 14, with 7 representing the neutral point. A pH value above 7 is basic and a value below 7 is acidic. The pH of water is important because high or low pH can cause aesthetic problems, and can cause toxic metals to leach from plumbing materials. The NMED recommends drinking water have a pH between 6.5 and 8.5.

Specific Conductance - Conductivity serves as a measure of the total dissolved solids (TDS) or salts in water. High total dissolved solids can impart an unpleasant taste and odor to water and can cause mineral deposits on plumbing fixtures. TDS is proportional to water hardness. Specific conductance can be multiplied by 0.7 to estimate TDS. The NMED recommends conductivity of less than 1,000 micromhos per centimeter for drinking water to prevent aesthetic nuisances.

Sulfate - Sulfate is a compound of sulfur and oxygen that is commonly found in ground water. Sulfate can give an unpleasant taste to drinking water and can cause diarrhea. The federal aesthetic standard for sulfate is 250 milligrams per liter (mg/L) for drinking water.

Nitrate as nitrogen - Nitrate is a compound of nitrogen and oxygen. There are many possible sources of nitrate contamination including fertilizer, animal waste, septic tanks, refuse dumps and natural geologic deposits. Generally, the concentration in ground water is low, but sometimes higher levels are almost always dangerous to infants under six months of age and can cause the "blue baby syndrome" a rare, but serious, disease in infants. State and federal health standards for nitrate as nitrogen are set at 10 milligrams per liter (mg/L) for drinking water.

Fluoride - Fluoride is a natural occurring element that is commonly found in ground water. Fluoride in drinking water can be assimilated into the bones and teeth. High fluoride in drinking water can cause dental fluorosis (mottling of the teeth), and skeletal fluorosis (weakening of the bones). NMED recommends a maximum fluoride concentration of 2 milligrams per liter (mg/L) in drinking water.

Iron and Anoxic Contamination (manganese, hydrogen sulfide, methane) - Anoxic contamination is a chemical condition in which the water is deficient in oxygen. It can be caused by septic tank discharges or by naturally occurring geologic deposits such as humus and peat. Iron, manganese, and hydrogen sulfide, typical anoxic contaminants, can cause severe taste and odor problems.

Anoxic water often has a sulfurous "rotten egg" odor and a metallic taste. If the water is agitated, such as in a washing machine, sink, tub or toilet, it becomes oxygenated, and the iron and manganese will precipitate as oxides. These oxides range in color from black, gray and brown to red, orange and yellow and can appear as small particles in the water or can cause stains on laundry and porcelain. The federal aesthetic standard for iron is 0.3 milligrams per liter (mg/L) for drinking water.

Dissolved Oxygen - Dissolved oxygen (DO) is an important parameter for ground water geochemistry. Low DO can indicate anoxic conditions (discussed above). No standards have been set for DO in drinking water.

Organic Vapor - The detection of organic vapor may indicate that your water contains gasoline or other volatile organic chemicals. It may also indicate the presence of harmless methane gas. There are health standards for some volatile organic chemicals, including benzene, toluene, and xylene. If organic vapor other than methane is detected in your water, further sampling will be conducted by the NMED. The NMED recommends that organic vapor be not detectable in drinking water.

WHAT TO DO IF YOUR TEST RESULTS APPROACH OR EXCEED THE STANDARD

1. Inform yourself of potential health risks by first reading any enclosed literature.
2. Attempt to locate the source of contamination and take corrective measures if possible.
3. Purify the contaminated water or establish an alternate safe source of drinking water for everyone using the contaminated well.
4. Have your water tested annually.

If you have further questions, contact the New Mexico Environment Department at 1-800-219-6157.