

Water From the Earth

In areas where fresh water is not available from a municipal supply, water may be obtained from the earth. The concept is simple: dig or drill into the earth until you reach a supply of clean water. In some areas water is available fairly close to the surface, while in others it is hundreds of feet down.

Water Quality and Quantity

A well-water system should provide clean water in sufficient quantities for the needs of the home and the people that live there. Both the quality and quantity of well water can and should be tested.

• WATER QUALITY:

Water from a well should be tested on a regular basis. You can hire someone to test it or test it yourself. A water test is not part of a home inspection, but it is something that should be done. Many home inspectors provide well water quality testing; homeowners should inquire as to the availability of this service in their area.

• WATER QUANTITY:

Don't let your well run dry. A quantity test is not common, but it can and should be done by an expert. The test, called a draw-down test, involves drawing water from the well at a standard flow rate to see how fast the water gets used up and how fast the well refills.

If you are a home buyer, do not hesitate to ask if the seller has ever had a problem with water quality or quantity.

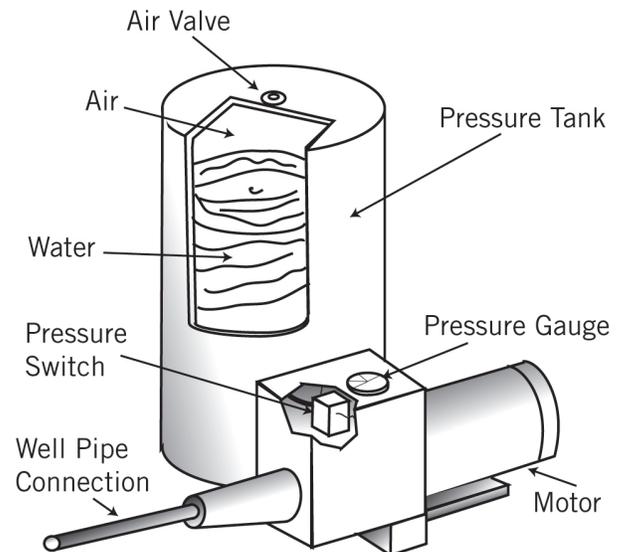
Pumping Equipment

With a shallow well, the pump is located in or near the home and is readily accessible. With deep wells, the pump is located at the bottom of the well, and you will neither see nor hear the pump. People commonly ask which is better: a jet pump mounted in the home, or a submersible pump at the bottom of the well? They both have their benefits and drawbacks:

- **PUMP IN THE HOUSE:** This pump is inexpensive and easily maintained and repaired, but it cannot suck water up from a very deep well.
- **SUBMERSIBLE PUMP:** This pump can draw water up from hundreds of feet in the earth. For a deep well, the submersible pump is your only option, but it is also expensive and difficult to maintain and repair.

Beyond the Scope of a Home Inspection

General inspection of the well, its water quality and quantity, and inspection of the well equipment are beyond the scope of a standard home inspection. Even so, most inspectors in rural areas will inspect any well-pumping equipment that is accessible.



Jet Pump Components

Home Buyers

If you are a home buyer, you should definitely do the following:

- Make arrangements to obtain a water sample for testing
- Obtain information from the current home owner about the well, including any water quality issues, water quantity issues, any recent repairs, such as replacement of pump equipment, and the location of the well if it is not obvious.

Signs of Trouble

- **SHORT CYCLING:** refers to the pump turning on and off repeatedly when a tap is turned on. A few things can cause this problem, including a defective or improperly adjusted pressure switch, or a waterlogged pressure tank.
- **LOW PRESSURE:** the water pressure for well systems is lower in general than for municipal systems. If you are moving into a rural area, the water pressure may seem low to you but may be perfectly normal. If the pressure is low, you can compensate by adjusting the pressure switch, or increasing the size of distribution piping in strategic locations. This is something a local plumber can look at for you.
- **ODORS:** if the water from the well has an odor, consult an expert. The odor could indicate a minor problem, such as bacteria in the hot water tank, or it could signal a major problem, requiring drilling a new well.
- **DISSOLVED MINERALS:** dissolved minerals, such as calcium, can play havoc with piping, well equipment and your appliances. Water filtration and softening can usually take care of this problem.

A well can and should provide clean and copious water. Whether you are a home buyer or home owner, getting to know your well system, and maintaining it properly will ensure its continued high performance.

