

# WELL RECORDS AND MAINTENANCE GUIDELINES

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If you have a home well, you alone are responsible for maintaining the safety of your drinking water supply. When your well system is suitably located, correctly installed, properly maintained, and regularly tested, you will have few problems with water quality.

This folder provides a place for you to record and file information about your well. These records will be particularly useful if any problems should develop in your water supply and you need professional advice. It is recommended that this folder be kept with other important documents about your home and property, and passed on to future owners. Water testing may be required by lenders when selling or refinancing your home. Having this record can enhance your ability to sell your property.

## WELL ANATOMY

Maryland has established guidelines for the construction of wells. All wells must be constructed by licensed well drillers in accordance with State regulations. The well must pass inspection and the water must be certified as potable (drinkable) by the county Health Department before the well can be used. The following components of a typical domestic well are illustrated on the accompanying figure.

**CASING:** A metal or plastic pipe used to line a portion of the bore hole. The minimum length (depth) of the casing is determined by State regulations based on the geology of the area. The casing must extend a minimum of 8 inches above the ground (24 inches in flood zones) to keep storm water runoff out of the well.

**GROUT:** Material used to create a watertight seal between the bore hole and the casing to prevent surface water and contaminants from running down the side of the well. Grout may be portland or quick-setting cement, or bentonite clay. The minimum depth or length of casing that must be grouted is also determined by State regulations.

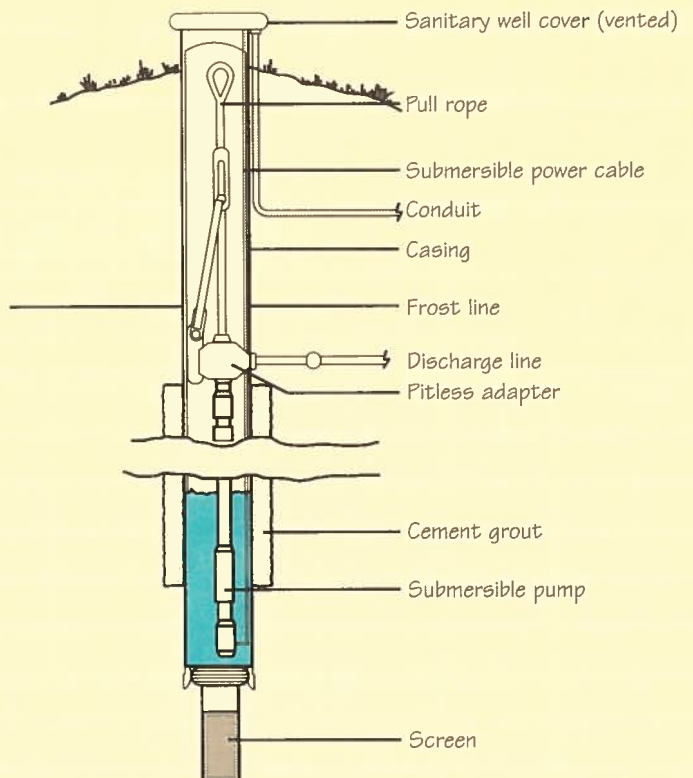
**WELL COVER:** A cap that screws or clamps onto the top of the well casing to prevent contaminants from entering the well.

**SCREEN:** A pipe-like attachment at the bottom of the well. Well screens are usually not required when drilling in bedrock, but they may be necessary if loose sand or fragmented rock is encountered. The screen is sealed on the bottom and has openings along its length that allow water to enter the well, but keep out sand and sediment.

**PUMP:** Draws water from the bottom of the well and into the distribution system. Many types and sizes of pumps are available. The two most commonly used are submersible and jet

pumps. Submersible pumps are installed in the well and can be removed relatively easily. Jet pumps have the motor located outside the well.

**PITLESS ADAPTER:** Provides a frostproof and sanitary hookup between the well and the household water distribution system. The pitless adapter must be located below the frost line.







# PROTECT YOUR WATER SUPPLY

- Keep surface water runoff from puddling around the well. Grade your lot so that water drains away from your well casing. A well **should not** be drilled on a "low" part of your property.
- Prevent surface water from seeping down the sides of your well. Make sure your well cap is not cracked and is tightly secured. If water tests show contamination, it is recommended that a well driller check the grout.
- If your well is more than 30 years old, have it inspected by a county Health Department sanitarian or a qualified well driller to make sure that the casing is not cracked or corroded.
- Install antibackflow devices on all faucets with hose connections, or maintain an air space between hose or faucet outlets and the water level in the container you are filling. Otherwise, you risk sucking contaminated water from laundry tubs, swimming pools, etc., back through the plumbing and into your well.
- Have your fuel oil tank tested for leaks, especially if it is installed underground. Contact your fuel supplier for assistance.
- Do not use gasoline, automotive products, solvents, pesticides, or excessive amounts of fertilizers near your well.
- Do not tie pets to the well casing. Animal waste deposited close to the well could result in contamination. Also, a large dog may break or crack the casing.
- Be careful never to hit the casing with a lawn mower or vehicle, or strike it with any force.
- Maintain your septic system. Improperly functioning septic systems are a major cause of well contamination.
- Your well should be disinfected with a chlorine solution any time work is done on the well or pump. Directions for shock chlorinating your well are available from your county Health Department.
- If there are unused or abandoned wells on your property, make sure they have been properly sealed to prevent direct contamination of groundwater by surface contaminants.

## For additional information on related topics, answers to questions, or comments, please contact:

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