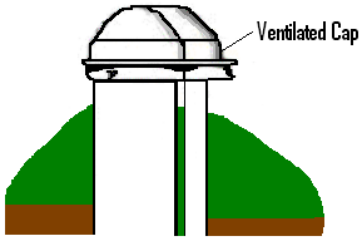




# Caring for Your Water Well System



The well cap protects the well from environmental factors; surface water, vermin, fertilizers, herbicides, pets, etc. Maintain landscaping around the well casing and cap so rainwater will not collect around the well. Slope the ground away from the well and keep the well cap a minimum of 8" above the ground.

- Inspect your well cap periodically for insect infestation (earwigs) and make sure the cap is tightly bolted and not damaged.
- A primary source of groundwater contamination is from failed septic systems. Refer to your pamphlet "Your Septic System" for information on proper maintenance of your septic system.

## Water Well Testing

The signs of drinking water contamination are not always obvious. Contaminated water does not always look, taste, or smell differently than safe drinking water. What's more, if you have a private water supply, you are your own Regulatory Agency. YOU are responsible for the quality of water that your family drinks.

ANNUALLY test your water for Coliform bacteria and nitrates. Also it is good idea to test for these contaminants during the spring and summer following a period heavy rainfall.

## Other Times to Test Your Well

- When you have a recurrent incident of gastrointestinal illness.
- When you are buying a home.
- When you are pregnant, are anticipating a pregnancy, or have an infant less than six months old.

## Collecting a Water Sample

- Contact your local health department for a list of local water laboratories.
- Follow ALL sample taking procedures carefully.
- Always use a sanitized, autoclaved bottle for testing provided by the laboratory doing the testing.

# Interpreting Your Water Results

## Bacteria

The laboratory will test your water sample for the presence of coliform bacteria, which are normally present in the intestinal tract of humans, birds, and mammals. They are always found in sewage, and are generally present in surface water and shallow ground water. Coliform in a water sample usually indicates that pollution is entering the water supply and that organisms which cause intestinal diseases may be present or may gain entrance to the supply.

Water containing Coliform bacteria is **UNSAFE** to drink. The bacteria can be destroyed by bringing the water to a rolling boil for one minute.

A sample found positive for Coliform bacteria indicates a contaminated well. The well will require immediate disinfection/chlorination\* to kill the bacteria. Resample the well 48 hours after this procedure.

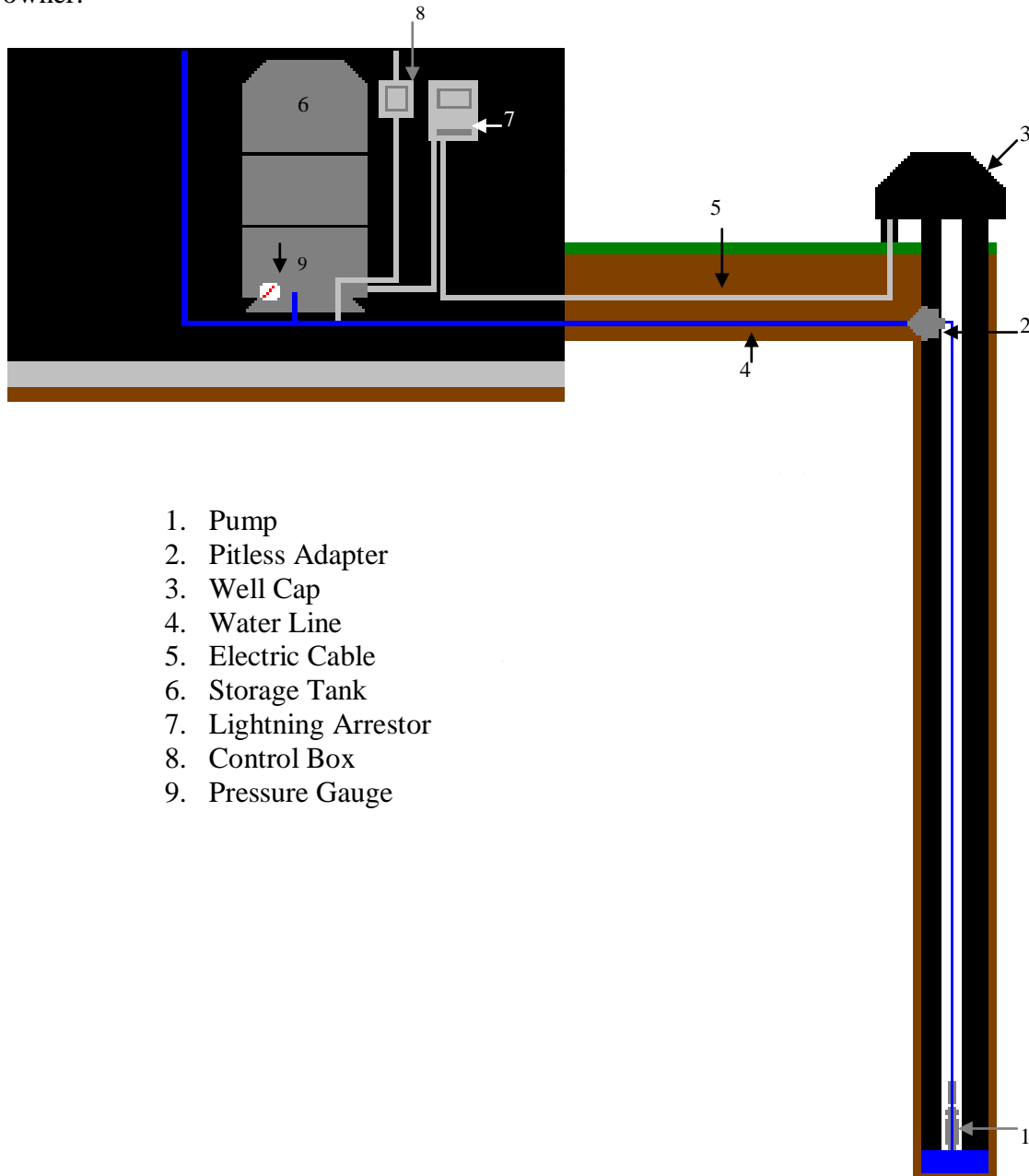
\*Contact your local health department or licensed well contractor for disinfection procedures.

## Nitrates

High nitrates (including nitrites) in water, if used by infants under six months of age, can cause an ailment commonly described as “Blue Baby Syndrome” and known medically as methemoglobinemia. This may be mild or can be severe and it requires immediate medical care. **BOILING WATER DOES NOT REMOVE THE DANGER.** It concentrates the nitrates, thus making it more dangerous. High nitrates in water may be an indication of natural and environmental contamination associated with your well. Steps to find the sources of nitrate problems are recommended.

# Water Wells Explained

Water well systems supply homes, businesses etc., with ground water. Ground water is found approximately 40 feet to thousands of feet underground in layers such as gravel, limestone, shale, sandstone, etc. When designed, installed and cared for properly, water well systems provide a safe water supply for the property owner.



1. Pump
2. Pitless Adapter
3. Well Cap
4. Water Line
5. Electric Cable
6. Storage Tank
7. Lightning Arrester
8. Control Box
9. Pressure Gauge

Your water well system draws water from the surrounding formations of rock into the well casing. The submersible pump pushes water through the drop pipe into the water line and into the storage tank. The water is distributed from the tank throughout the house as needed.