

OBTAINING A WATER SAMPLE FOR BACTERIAL ANALYSIS

Kitt Farrell-Poe

The only reliable way to detect bacterial contaminants in your water is to test it. Special procedures are needed to obtain water samples that will be analyzed for bacteria. Always contact the laboratory to which you will be sending the water samples. They should have special containers and additional information on collecting, storing, and shipping the sample. For obtaining a sample for other than bacterial analysis, please review the Arizona Cooperative Extension fact sheet *Well Water Testing and Understanding the Results*.

The following steps will help you obtain the most reliable sample for bacterial analysis.

1. Water samples for bacteria tests must always be collected in a sterile container. It is best to obtain a container from the laboratory that will be analyzing your water.
2. Choose an inside cold water line. Remove any aerators, flow restrictors, or screens. DO NOT CHOOSE a faucet which is connected to a water treatment device (water softener, reverse osmosis unit, distiller, etc.) or one that swings or leaks. (The bathtub faucet is a good spot to obtain your sample.)
3. Sterilize the faucet by flaming the end of the tap with a disposable butane lighter. Keep in mind that by sterilizing the faucet with a flame, you could be removing a source of bacterial contamination. NOTE: extreme care should be used when using an open flame to accomplish this procedure.

4. Let the water run for 2-5 minutes. This clears the lines and brings in fresh water.
5. Fill the container to overflowing or to the "fill line." Be careful not to touch the inside of the container with your fingers or the faucet.
6. Refrigerate the samples promptly. It is best if the samples arrive at the laboratory within 6 hours of taking the samples, but some labs allow up to 12 hours (check with the lab for their policy). Remember to put the samples in an ice chest with ice when transporting them to the laboratory. Many labs will not accept bacteria samples on Friday, so check to find out the lab's schedule. Mailing bacteria samples is not recommended because laboratory analysis results are not as reliable.
7. Write down the collection date, time, and location for each sample so that you can provide this information to the testing laboratory.

For additional information

Arizona Well Owner's Guide to Water Supply (AZ1485)

Arizona Cooperative Extension (ACE) bulletins contain a variety of information about water, water quality, safe drinking water, and private wells. They are available through your county Extension office or from CALSmart Distribution Center, located in Tucson, at 4101 N. Campbell Avenue; (877) 763-531; (520) 795-8508 FAX; or visit <http://cals.arizona.edu/pubs/>



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This information has been reviewed by University faculty.
cals.arizona.edu/pubs/water/az1486g.pdf

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