

Well Water Sampling Procedures

Before sampling

Prior to sampling your well, the U.S. Geological Survey (USGS) will contact you to set up a date and time to conduct a plumbing review of your well to ensure that it meets sampling criteria. The plumbing review is in advance of and separate from well sampling and ensures that we are able to collect a raw, untreated sample that is representative of the underground aquifer. Typical home treatment systems that will need to be bypassed before sampling include water softeners, filters, or ultra violet light.

During the plumbing review, we will determine a sampling point such as an outdoor spigot or hydrant that utilizes well water. You will also be asked to sign a permission form that is required prior to well sampling.



After the initial plumbing review is complete, you will be contacted to schedule an additional time for USGS to sample your well. If the sampling point is outside of your home, you do not necessarily need to be present during the sample collection appointment.



During sampling

Your well water will be sampled from the point identified during the plumbing review. Total well sampling time should take no more than 3 hours. During their visit, USGS staff will:

1) Measure the water depth level: This involves removing the well cap and inserting a sterilized metal measuring tape down the well until it makes contact with water.



2) Purge the well: Fittings and a hose will be attached to the sampling point and the water will be turned on to purge the well in order to ensure water from the aquifer is sampled rather than water that has been sitting in the well and pipes for a long time. This step typically takes 30 minutes to an hour.

3) Collect water samples: The sample will be collected by filling several bottles with the running water. We will keep the water running as far away from your home as possible and can run the water somewhere specific if you prefer, like into a flower bed or vegetable garden.



After sampling

Samples will be sent to several different laboratories for testing. The laboratories will analyze the samples and send USGS the results. It can take anywhere from several weeks to several months to receive the final laboratory reports. Once we have received and reviewed the results, we will send you a letter with the results of the groundwater tests. The letter will also include information on potential health effects if concentrations of detected elements exceed any established levels that are designed to protect human health.