# Mississippi State University Extension Service

## Chain-of-Custody Water Testing and Well Yield Testing

The Mississippi State Department of Health (MSDH) has an environmental laboratory certification program for water testing labs to ensure data accuracy.

The entire list of water testing laboratories accredited by the MSDH can be found online at https://msdh.ms.gov/msdhsite/\_static/14,0,188.html. Search for Laboratory, select/click on Environmental Laboratory Certification Program, and then scroll down and click on the link for Participating In-State Labs for the Quick Reference List.

Some labs are accredited for many water testing parameters, while others may only be accredited for a few (like bacteria). When discussing water testing with a state-accredited laboratory, confirm that they hold current state accreditation for all of the water test parameters that you are interested in testing on your water supply.

Any water testing done to legally document water quality before a nearby activity or land use change (e.g., gas drilling, mining, construction) should be collected by professionals and delivered to a state-accredited water lab. This type of testing is often referred to as chain-of-custody or third-party water testing. All individuals who handle the sample are documented on the chain-of-custody form to show that only unbiased professionals had access to the sample. This also ensures that the sample is collected using proper protocols and analyzed using proper methods.

It is up to each laboratory to determine which lab employees or independent consultants are qualified to collect and submit samples to their laboratory. Using this chain-of-custody process ensures that the water quality results will be more useful in any potential legal proceedings related to contamination of drinking water supplies by nearby activities. Chain-of-custody testing is also used in some real estate transactions.

Not all state-accredited laboratories offer chain-of-custody services. Potential water testing clients seeking chain-of-custody testing should confirm with each laboratory that they can, in fact, provide this service.

To document the yield of a well before a land use change, a homeowner can contract with a well driller or other professional rather than a water quality testing laboratory. Yield testing results will vary depending on the technique used and natural hydrologic changes. A list of licensed well drillers can be found at https://www.mdeq.ms.gov/permits/water-well-drillers/forms/.

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