

at the Illinois State Water Survey

Water Quality Concerns?





We can help!

Importance of Client Data and Correct Sampling Procedures

An important factor in solving your water problem is the relationship between the water quality of your sample and typical qualities for that type of water. The more details you can provide about the water source, the more accurately we can respond to your questions. Therefore, please provide the geographic location where your sample was taken, well depth, sampling date and time of day, and owner. Complete information about your sample will provide valuable clues for a more accurate solution to your problem.

Before attempting to collect or submit a sample, contact the PSL. Staff will make sure that you receive the appropriate sample collection kit and specific instructions on



sample handling and submission. This short discussion will also allow the PSL to become familiar with your problem and make sure that your sample is representative and appropriate for analysis. *Only samples submitted in PSL sample collection kits can be accepted for analysis*. Water samples may be delivered in person to the laboratory or mailed using the U.S. Postal Service or commercial delivery services. Call the PSL at (217) 300-7420 for more information or to request a kit.







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Who We Are

The Public Service Laboratory (PSL) within the Chemistry and Technology Section of the Illinois State Water Survey (ISWS) tests water samples and suggests solutions for various water problems. Whether the problem is health related or simply a nuisance, these water analyses are among the most important ISWS public services. As a state agency concerned with Illinois

water quality and quantity, the ISWS provides tax-supported public services for residents, government units, and industries of Illinois.



Our Clients

Each year, hundreds of Illinois residents turn to the PSL for help. Private citizens concerned with household water problems account for about half of all service requests.



Other requests come from a diverse group of industry representatives, well drillers and engineers, farmers,

university and institutional administrators, water treatment equipment dealers, government and public health officials, recreational managers, doctors, dentists, and veterinarians.

Laundry stained orange by well water may prompt a homemaker to send the PSL a water sample. A high death rate among piglets may lead a farmer to provide a sample of livestock water. Doctors may submit samples of tap water for patients on low-sodium diets. Dentists may request fluoride content checks of their patient's water.

Since 1895, PSL chemists have been testing water samples from around the state. The test results are part of the extensive database stored at the ISWS.

Analyses

The PSL analyzes water samples from household taps, wells, cisterns, lakes, and ponds throughout Illinois.

Solutions may involve installing a water treatment unit, modifying a plumbing system, or contacting a specialist. Because the ISWS has no commercial interests, recommendations can be



made without regard to brand names. Occasionally, PSL staff can answer questions and recommend solutions to common water problems over the phone.

Considerations in sample analysis include the water source, how it will be used, and problem symptoms. Although each analysis is tailored to the water being tested, most samples are scanned for metals, including arsenic, calcium, iron, magnesium, manganese, and sodium. Samples also are checked for hardness, total dissolved solids, pH, alkalinity, color, turbidity, chloride, sulfate, fluoride, and nitrate. The PSL does *not* perform bacteriological analyses or analyses for pesticides, herbicides, oils, or gases.

Some problems require specialized tests that we may be able to perform. In some cases, the PSL analysis may not identify any likely cause of the problem, but even this information can be useful. If the mineral content is not the cause, ISWS scientists may recommend additional tests and help you look elsewhere for a solution.



When the laboratory has completed the analysis of your samples, you will receive a report containing the testing results. Comments will be included regarding the water quality and improvements that can be made to the water.