



# Sampling Waters for Pesticide Analysis

## RIVERS, STREAMS, LAKES, PONDS, RESERVOIRS AND WELLS

There's an old scientific axiom that says the result of any test can be no better than the sample on which it is performed. Proper procedures must be followed to ensure the analysis is accurate. Samples for pesticide analyses must be handled in such a way that they do not deteriorate or become contaminated before they reach our laboratory.

### WELL WATER

1. Collect a sample only after the well has been pumped sufficiently to ensure that the sample represents the groundwater source. Make sure that the sample is drawn before it passes through any treatment device such as a water softener or filter.
2. Collect at least one quart in a clean, amber glass bottle. Rinse the bottle 2 or 3 times with the water to be sampled before making the collection. Cap the bottle with a teflon-lined plastic lid. Code each bottle and record the date, time and the name of the sampler. Sampling kits may be purchased from A & L Great Lakes.
3. Some pesticides break down quickly in water. The sample must be kept refrigerated at 34°F to 38°F until all tests are completed.
4. Ship the sample as soon as possible to assure that it is received at our laboratory within 48 hours after collection. All water analyses must be completed within 14 days of collection.

### LAKES, PONDS AND RESERVOIRS

Lake and pond waters are subject to considerable variations due to rain, runoff, wind and seasonal stratification.

1. The location, depth and frequency of sampling will depend on local conditions. Analytical composition is likely to vary with both the depth and the horizontal location. Under

most conditions, neither total nor average figures are especially significant. Local variations are more important to the sampler. Therefore, collect samples separately. Do not composite them.

2. The care and storage of the samples remain the same as that for well water.

### RIVERS AND STREAMS

The analytical composition of the water may vary with depth, stream flow and the distance the sample is taken from the shore.

Knowledge of the volume, movement and composition of various parts of the water being sampled is required.

1. A grab or catch sample can be taken if the source is constant in its composition over a considerable period of time over substantial distances in all directions. Take the sample in the middle of the stream at mid-depth.
2. An "integrated" sample should be taken if the analytical composition of the water varies with width and depth of the source. However, integrated sampling is a complicated process and usually requires special equipment.
3. The care and storage of the samples remain the same as that for well water.

### SHIPPING INSTRUCTIONS.

1. Place the refrigerated sample in a styrofoam or other insulated container. Pack the sample in ice or use pre-frozen packs. Secure the sample in the container to prevent breakage.
2. Complete the instruction form and enclose it with the sample. The legal integrity of the sample can be maintained by including a Chain-of-Custody form that indicates the sampler's name and the date and time the sample was taken.
3. Ship the sample via UPS Overnight, Federal Express or other similar service. It is important that the sample be received at our lab within 48 hours after it was collected. Ship on Monday, Tuesday, or Wednesday to avoid a Weekend delay.

FACT SHEET

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