How To Take A Water Sample

Water analyses can only be accurate if the sample is taken correctly. When collecting a water sample, please follow these simple guidelines:

DETERMINE TEST

Prior to taking a sample and making a payment, please determine which of our offered tests is best for your goals. The test(s) you chose will determine the size of the sample. Currently we offer the following water quality tests:

- Base water chemistry analysis for freshwater ponds and aquaculture (pH, hardness, alkalinity, total salinity, total ammonia nitrogen, un-ionized ammonia, nitrite, chlorides)- 16 oz. required
- Base water chemistry analysis for saltwater ponds and aquaculture
 (pH, hardness, alkalinity, total salinity, total ammonia nitrogen, un-ionized ammonia, nitrite, chlorides)- 16 oz. required
- Water clearing treatment test (calcium carbonate, calcium hydroxide, calcium sulfate, aluminum sulfate, or magnesium sulfate as indicated by basic water chemistry)- Base water chemistry test and 0.5 gallons required
- Oils and Petroleum Products (base detection)- 16 oz. required

If you have any questions please contact <u>brittany.chesser@tamu.edu</u> or <u>todd.sink@tamu.edu</u> prior to sample submission and/or payment.

CONTAINERS

Samples should be collected in a new clean, plastic bottle with a screw cap. 16-20 ounce drinking water bottles can be reused if you rinse the bottle three times with the water source to be submitted to the laboratory. Please note that a minimum of 0.5 gallons is required for the water clearing test, while 16 ounces is sufficient for all other tests. Insure the cap is tight prior to shipping. Clearly identify each bottle with a simple sample I.D. using the last name, date, source format (i.e. Smith, 4/19/2012, well). When mailing, place bottles in a box and pack with a loose, soft packing material such as newspaper to prevent damage from rolling or shaking. Samples in glass containers have higher potential for breakage and therefore will not be accepted and tests will not be conducted.

COLLECTING A SAMPLE

When collecting a water sample, be sure not to disturb any sediments prior to or during sample collection. Sediments picked up along with the water sample will potentially change the water chemistry and results of the water tests will not be accurate. The water sample is acceptable "as is" if sediment is already suspended in the water column despite no disturbance from the collection process. Also, make sure the sample bottle contains no vegetation, insects, snails, tadpoles, small fish or other organisms, as they will change the water chemistry and the result of the water test will not be accurate. To collect a sample, place a thumb over the mouth of the empty collection bottle, place the bottle 6" to 24" below the surface of the water, and remove your thumb allowing water to fill the sample bottle. Make sure all the air has been removed from the bottle and place the cap on the bottle before removing it from the water. Check the sample to determine that no air is trapped inside the bottle. If air is trapped inside the bottle, empty the bottle and repeat the process again.

FISHERIES (PONDS AND LAKES) AND AQUACULTURE

Provide as much written information as possible about the condition of the tank (flow through or recirculation) or pond along with the sample. If fresh water is being added or running into the tank or pond, collect the sample in the area least affected by the addition of the fresh water. When samples are taken from salt-water systems or ponds where fresh water may have been added, gather water from both the top and bottom of the pond. The lab cannot test for dissolved oxygen or free carbon dioxide, even though both of these gases can affect fish mortality. These substances must be tested on-site, and kits for conducting these tests are commercially available.

WELL WATER

Let the well pump operate ten minutes to an hour before taking the sample. Take the sample as close to the pump as possible.

ASSESSING WATER PROBLEMS

Two separate water samples may be required to address water related problems due to plumbing and/ or fixtures. One sample should be collected at the point of entry (well or water service) and another at point of use (tank, pond, etc.). This sampling method will help pinpoint problematic plumbing.

PAYMENT

Payments can be made at our online store by clicking <u>HERE</u>. Once you have added the desired test to your cart, you will have the opportunity to provide further information on the sample. Your name and the sample name should match the label on the sample bottle. After clicking continue, you will be able to add additional tests, if needed, before checking out.

Please do not include payment with samples submitted to the lab. You will receive an Order Confirmation email once your payment has been received. Please note that the lab only performs tests as indicated during the payment process and no analyses can be performed prior to payment.

SHIPPING INFORMATION:

Aquatic Diagnostic Laboratory Brittany Chesser 495 Horticulture Dr., room 305 2138 TAMU College Station, TX 77843-2138