BIOTECH LAB

INSTRUCTIONS

Prior to collecting sample:

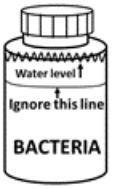
1. ***READ THESE INSTRUCTIONS FIRST*** *(AVOID MISTAKES caused by not reading these instructions)*
2. ***First-time customers:*** please call first at 804-520-4807 to review instructions, avoid mistakes, and alleviate the need to resample or make multiple trips.
3. ***HOURS:*** **Email** us for current hours and upcoming closures. Samples are normally accepted Sun: noon-7pm, & Mon-Thurs: 7am-7pm. However, we are open *most* weekends; occasionally we do close, sometimes with short notice. So, if planning to deliver >7pm, email us before collecting sample. For Fri/Sat delivery, email us by Thurs to ensure we will be open. Bacteria tests *require* 24-hour incubation. Tests are started the evening of sample delivery; results are emailed the next evening. Chemical results are emailed the evening of delivery.

PAYMENT is due with the sample. Cash, check or money order payable to Biotech Lab. No credit cards.

PLEASE NOTE! SUBMIT **SEPARATE SAMPLES** FOR BACTERIAL AND CHEMICAL TESTING.
DO NOT USE STERILE CONTAINERS FOR CHEMICAL SAMPLES; sample will be rejected.

BACTERIA: **$60 per test**

Presence/absence test for **Total coliform bacteria and *E. coli***.
Total coliform bacteria are indicators of environmental contamination.
E. coli is an indicator of fecal contamination.



use **1 sterile** container for bacteria

CHEMICALS:

Lead, Arsenic, Copper	**$60 per test**
Nitrate, **Nitrite**	**$30 per test**
Other available tests	**$30 per test**

Alkalinity, Chlorine, Manganese, pH, Sulfate,
Conductivity / Total Dissolved Solids, Hardness (calcium plus magnesium),
Iron (total and soluble), Tannins (for organic matter)



use **1 water bottle** for all chemical tests

** For loans, first check with your lender on chemical tests and 3rd party collection requirements. In addition to bacteria, **lead**, **nitrate,** and **nitrite testing** may be required, esp for VA loans. VA loans & some FHA loans require 3rd party collection.*

SAMPLE COLLECTION – ALL SAMPLES

1. Water samples ≥10 ppm chlorine will be rejected. If you smell chorine, level is too high; sample will be rejected.
2. If time allows, we recommend waiting at least 5-7 days after sanitizing a well before collecting a sample.

SAMPLE COLLECTION - CHEMICAL ANALYSIS

1. Use a clean, 8-12 oz drinking water bottle (that has only contained water). You may obtain one from our large cooler labeled Chemical Bottle Supply, on the ground outside of the drop box. Do not write on lid or label. Or use your own. Do not use a sterile container for a chemical sample or it will be rejected. Wash your hands.
2. **LEAD and COPPER:** Lead and copper contaminations are typically associated with plumbing, and the goal is to determine whether there is leaching into water that you drink. Therefore, we recommend a 'First-Draw' sample. We recommend collecting the sample from the kitchen faucet (other chemical tests may be performed using this sample). The night before, flush the faucet 15 minutes, then rinse the bottle 3 times and allow it to drain. DO NOT USE the water overnight. In the morning, before any other use of the water, collect the sample using a funnel to capture all water exiting the faucet. Fill the bottle to the neck.
3. For other chemical testing not including lead or copper, use a faucet of your choice.
   a. If also collecting a bacteria sample, you can collect the chemical sample after the bacteria sample (in the appropriate containers) for convenience.
   b. Rinse the water bottle 3 times prior to filling, then collect the sample. Fill the bottle to the neck.
4. See instructions 3, 4, & 6 on side 2. Place the sample in the cooler inside the drop box.

READ THESE INSTRUCTIONS **BEFORE** COLLECTING SAMPLE

A. ***First-time customers,*** *please call first at 804-520-4807 to review instructions and to alleviate the need to resample or make multiple trips.*

B. ***Deliver*** *sample the day it is collected. For a loan or permit, you may want to sanitize the well first.*

C. *Visit our website to see pictures of each step: biotechlabwatertesting.com/our-process*

SAMPLE COLLECTION - BACTERIA ANALYSIS – sterile container is required

1. Use 1 BioTech Lab sterile container for 1 bacteria test. Don't waste; containers are expensive. See picture on other side. Sterile containers may be obtained from our drop box (on pole). Also, some Health Depts (HD) maintain a supply for convenience (check with the HD prior to going to pick up). The containers are sealed using a plastic shrink wrap band that ensures sterility and must be intact prior to sample collection. [Do not use a regular drinking water bottle that is used for a chemical sample.] If the well has been sanitized, there must be NO chlorine odor and less than 10 ppm (mg/L) prior to sample collection.
2. Sample Collection Procedure – Wash your hands:
   a. *Sanitize faucet*. We recommend using the bathtub (primarily) or outside tap. Do not use the kitchen faucet as these tend to show false-positive results.
      i) For bathtub faucet (or other indoor tap): using a small spray bottle, apply a 10-20% bleach solution (recommended) or at least 70% rubbing alcohol. Let bleach set 20 minutes or re-apply alcohol several times as a precaution. *Run the water at least 20 minutes* to flush the pressure tank and bring up 'new' water from the well. Collect the sample (steps b-e).
      ii) For hose bib (or other outdoor tap): Connect a hose to the hose bib to direct water away from the house. *Flush the plumbing at least 20 minutes*. Assuming a metal spigot, flame the opening using a butane lighter (e.g., charcoal lighter) or plumber's torch for about 1 minute, don't over-heat. Allow to cool about 1 min, esp. in cold weather. Flush again for 30 seconds to rinse off char. Use a bucket to avoid splash-back that might re-contaminate the hose bib. Collect sample (steps b-e).
   b. Tear off shrink wrap seal completely from the sample vessel cap before opening and dispose.
   c. Unscrew the cap holding the outside surface. Do not contaminate the cap; do not touch the inside of the cap. **DO NOT RINSE THE CONTAINER**. (Small tablet or particles may be visible; leave it in the container.)
   d. **Fill the container with cold water TO THE NECK**. See diagram on side 1. Do not try to match the line! The sample will be rejected if the level is too low. [Some clients are not able to ignore the line, so fill ½" ABOVE the line.] Also, do NOT overfill; stop at the threads.
   e. Securely tighten the cap immediately after filling. Shake to dissolve the tablet/powder. Place in refrigerator or otherwise keep cool until delivery (step 6 below).
3. Complete one Request for Analysis form for each property address. Include all information, especially **date/time collected**, contact phone numbers (follow-up calls are made in the evening), and an email address to receive results. See back of form for tips. ***Print legibly (very important!).*** Incompleteness, illegibility, or inaccurate information and delays/consequences resulting from these errors are the sole responsibility of the individual providing the sample. A **signature** is required in the available space**.**
4. Fold the completed form in half (top to bottom), and fold again (top to bottom.) Fold payment inside form. See prices on reverse side. ***Payment options*** *include cash, check, or money order (available at Walmart using debit nearby on Rt 10) payable to Biotech Lab.* ***Samples will not be processed without payment.*** Wrap form & payment around the sample container securing it with the rubber band.
5. For transport, sample should be kept cool without getting the form/payment wet. Place sample/form/payment in a cooler. Or put in a sealable plastic sandwich-size baggie, then put this 1st baggie inside a 2nd sandwich-size baggie with ~3 ice cubes. Upon delivery, put only the 1st baggie with the sample inside the cooler inside the drop box (at the address below). ***Toss ice on the ground and take the 2nd baggie with you***. The cooler is not big enough for large bags or ice. An ice pack inside the cooler will keep samples cool.
6. Deliver sample the ***same day as collected*** **to** ensure regulatory compliance. Do not put samples in the large Chemical Bottle Supply cooler on the ground (not routinely checked). Do not mail or ship samples. Email us, so we have your email for report; check your spam folder.

BIOTECH LABORATORY

Email us at biotechlab@verizon.net for address of the lab or any questions.
Call us at 804-520-4807 anytime, including evenings and weekends, to go over insructions.
Visit us at **biotechlabwatertesting.com** (see pictures for orientation)
Annual bacteria testing is recommended per VDH.