

# BIOTECH LABORATORY

## OPERATION AND REPORTING

***First-time customers, please call first (in evening/weekends, 804-520-4807) to review instructions and to alleviate the need to resample or make multiple trips.***

Samples are accepted Sunday through Thursday; reports are issued Monday through Friday. Deliver samples prior to 7 pm of the day collected. Contact us for after-hours and weekend availability. The bacteria test requires 24-hour incubation; test is started the evening of sample delivery, and results are sent the next evening.

**PRICE LIST: *Payment is due with sample unless a monthly invoice has been established.***

<u>ANALYSIS</u>	<u>PRICING</u>
Bacteriological *: Presence/absence test for <b>Total Coliforms</b> and <b><i>E. coli</i></b> . Total coliforms is an indicator of environmental contamination. <i>E. coli</i> is an indicator of fecal contamination.	<b>\$50</b>
Chemical *: <b>Lead</b>	<b>\$50</b>
<b>Nitrate, Nitrite</b> Alkalinity, Copper, Manganese, pH, Sulfate, Iron (total and soluble) Conductivity (Total Dissolved Solids), Tannins (for organic matter) Hardness (calcium plus magnesium)  ----- <i>Lead, nitrate and nitrite are often required for property transfers, esp. FHA/VA loans (in addition to bacteria.</i>  Contact BioTech Lab to determine whether we can meet other water testing needs.	<b>\$25 per test</b>
PAYMENT METHODS: Check, cash, money order (at nearby Walmart). Payable to <u>Biotech Lab</u> . No credit cards.  ----- <i>* For loans/property transfers, check with your loan officer on tests required and 3<sup>d</sup> party collection. If you need a bacteria test and chemical tests, then you must submit 2 samples.</i>	

### **SAMPLE COLLECTION - CHEMICAL ANALYSIS**

1. Samples for chemical analysis do not need to be sterile, so please do not use one of our expensive sterile containers for chemical samples. Collect sample using a clean, 6-12 oz drinking water bottle (that has only contained water). You may obtain one from our large cooler on the ground behind the dropbox. Rinse the sample bottle 3 times with water from the tap which will be sampled.
2. **Collecting a sample for LEAD analysis.** The lead test, to be valid, must be a 'First-Draw' sample, i.e. it is collected before any other use of the water in the morning. Flush the faucet and line where sample will be collected for 10-15 min the night before sampling and allow the sample bottle to drain and dry. DO NOT USE the water overnight. **COLLECT THE SAMPLE IN THE RINSED BOTTLE IN THE MORNING BEFORE USING THE WATER FOR ANY OTHER PURPOSE.**
3. **If collecting samples for both lead and bacterial** analyses, collect sample for lead analysis BEFORE collecting sample for bacterial analysis. Collect the lead sample, then proceed with faucet sanitization and collection of the bacterial sample. This is relevant only if a lead test is needed.
4. See Instructions #2 and #4-6 on the other side. Place sample in small cooler, in the dropbox.

## READ **BEFORE** COLLECTING SAMPLE

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### **SAMPLE COLLECTION - BACTERIOLOGICAL ANALYSIS**

1. Obtain a sterile sample vessel provided by BioTech Lab (from our dropbox or some Health Depts). The plastic shrink wrap seal must be intact prior to sample collection.
2. Collection from the kitchen faucet is **not recommended**. DO NOT collect samples from water fountains, leaking faucets, or faucets with attached aerators, filters, etc. Remove/disconnect aerator, filter, etc. if necessary.
3. Sample Collection Procedure:
  - a. ***Sanitize faucet.*** For outdoor faucet: flame with butane lighter or plumber's torch for 1-1½ minute (allow to cool for a few minutes before running water, esp. in cold weather). For indoor faucet: wipe or spray with 10% bleach or at least 70% rubbing alcohol, let stand 20 minutes.
  - b. ***Flush line at least 20 minutes*** (to cycle & flush the pressure tank) before collecting sample. This is especially important for a vacant house. For an outdoor faucet, run bathtub first if possible and then run faucet for several minutes. Avoid splash-back once outdoor faucet is sanitized.
  - c. Tear off shrink wrap seal surrounding the cap of the sample vessel and dispose. Be sure to remove the entire shrink wrap seal.
  - d. Unscrew the cap and hold by the outside surface. Do not contaminate the cap; do not place fingers inside the cap. **DO NOT RINSE THE VESSEL.**
  - e. Fill the vessel **TO THE NECK** leaving an air space. See diagram on top of form. **TOO MUCH WATER IS BETTER THAN NOT ENOUGH.** Sample will be rejected and cannot be processed if the level is too low. (Ignore the line. If you choose to focus on the line, fill water ½" ABOVE the line.)
  - f. Securely tighten the cap immediately after filling and invert to dissolve the tablet/powder.
4. Complete one Request for Analysis form for each property address. Include all information, especially a contact number and an email to receive the results. See back of form for tips. ***Print legibly.*** Incompleteness, illegibility, or forms containing inaccurate information and any delays or consequences resulting from these errors are the sole responsibility of the individual providing the sample. **Signature of person collecting the sample is required.**
5. Fold the completed form in half (top to bottom), and fold again (top to bottom.) Place payment inside form. Wrap form & payment around the sample, & secure it with the rubber band provided.
6. ***Include payment - cash, check, or money order (available at banks, Walmart, etc.). Samples will not be processed until payment is received.***
7. For transport, sample should be cool, without getting the form wet. Place sample in a sealable plastic sandwich-size baggie. Put that baggie inside another sandwich-size baggie with ~3 ice cubes ice during transport. Upon delivery, remove inner baggie with sample. Open dropbox, place sample inside the cooler in the drop box. ***Toss ice on the ground.*** Cooler is not big enough for gallon-size baggies or ice. Ice pack is located inside cooler to keep samples cool.
8. If the cooler is not in the drop box, please contact BioTech Lab. Do not put samples in the large Chemical Bottle Supply cooler on the ground; that cooler is not routinely checked. Deliver sample to BioTech Lab ***the same day as collected*** to ensure regulatory compliance. Do not mail samples. If you are unable to meet this timeframe, please contact us.

### **BIOTECH LABORATORY**

Email anytime at [biotechlab@verizon.net](mailto:biotechlab@verizon.net). Call evenings/weekends 804-520-4807.

*The lab is located in a neighborhood. Please use the dropbox at the street end of the driveway.*

*No need to come to the house. Contact us with any questions at [biotechlab@verizon.net](mailto:biotechlab@verizon.net).*