Legionella, Fecal Coliform & Total Coliform Sampling Guide

CHAIN OF CUSTODY
Must contain sampling date, time sampled, and sample source. This is needed to determine whether or not samples are within hold times and analysis procedure. If looking for Total coliforms please inform us if you would like Presence/Absence (Colilert) or Enumeration (MFT-Membrane filtration technique).

SAMPLE COLLECTION
All water samples must be taken in approved, sterile sampling containers, which our laboratory can provide upon request. Treated (municipality / distribution systems) water samples must be de-chlorinated with sodium thio-sulfate (this is already in bottles that would be provided by our laboratory). Keep sampling bottle closed until it is to be filled.

**Distribution or sink tap samples**
1. Remove aerator for faucet.
2. Rinse faucet with a bleach solution.
3. Flush line- by turning tap fully on and letting it run for 2 to 3 minutes, or for a time sufficient to permit clearing the service line.
4. Reduce water flow to permit filling bottle without splashing.
5. 100mL is needed for each sample submitted for analysis.

**Well samples**
If a sample is taken from a well fitted with a hand pump, pump water to waste for about 5 minutes before collecting sample. If the well is equipped with a mechanical pump, collect sample from a tap on the discharge. If there is no pumping machinery, collect sample directly from the well by means of a sterilized bottle fitted with a weight at the base; take care to avoid contaminating sample by any surface scum.
**Legionella sp.**

Collect water sample from the littoral zone or from the cooling towers, condenser coils, storage tanks, showers, water taps, etc. In most instances, a 1 liter water sample is sufficient.

**Hold Times**

1. Fecal coliforms must be run within 6 hours of samples collection.
2. Total coliforms, *E. coli*, Fecal streptococcus, Sewage Screen, *Legionella sp.*, and Heterotrophic Plate Count samples need to be run within 24 hours of sample collection.

If client is aware that hold times are going to be exceeded but would like analysis anyway, please indicate this on the Chain of Custody. If hold times are exceeded results are invalid and this will be noted on reports.

**Turn Around Times**

1. Total coliform-Presence/Absence (Colilert) results can be given in 24 hours.
2. Total coliform enumeration (MFT), Fecal coliform, Sewage Screen and *Legionella sp.* results will take 6-10 days.

**Sample Shipping**

All samples must be shipped cold, not frozen and should remain up right. The best way to ship method of shipment for these samples is to use ice packs, not sodabottles filled with frozen water, bags of ice or just loose ice. Samples that are not shipped properly could end up getting contaminated or rejected.