

Due to the sensitivity of coliform testing and extensive regulations for the processing of those samples, here are some tips for sampling microbiological analyses using IDEXX bottles to help prevent accidental contamination during sampling and invalidation of sample upon receipt at the laboratory:

1. Store sample containers in a cool, dry area.
 - a. Prior to sampling, ensure containers are not cracked or have other anomalies.
2. Do not collect samples in windy or rainy conditions; or near excessive vegetation.
3. Wash hands and wear clean gloves while sampling.
4. Be sure to thoroughly sterilize and flush sampling taps.
5. Use sampling equipment that can be thoroughly sterilized between samples.
6. Do not mishandle sampling containers or lids while sampling.
 - a. Do not touch the lip of the container or the tap.
 - b. Do not place lids on dirty surfaces or in pockets.
 - c. Use caution when handling sample containers and lids while wearing gloves, as gloves are NOT sterile.
7. COMPLETELY remove the plastic seal around the lid of the container.

*NOTE: Samples are OFTEN received at the laboratory with plastic seals still attached to the lids of the containers, which may introduce bacteria into the sample. Samples received with plastic seals still on the lids require documentation and their **results may be rejected by regulatory agencies.***
8. Fill sample containers slightly ABOVE the marked 100 mL line on the bottle (not below). Also, do not overfill the containers; samples must have some headspace. The method requirement for Coliform bacteria is 100ml +/-2mls.
9. Samples analyzed with excessive residual chlorine will react with the testing reagent and require invalidation.
10. Use clean coolers to transport samples.
 - a. A laboratory soap solution is recommended.

NOTE: If a chlorine solution is used for cleaning coolers, allow the cooler to dry completely prior to transporting volatiles or semi-volatile samples as the sodium hypochlorite vapors could contaminate those samples.
11. Bag samples to help prevent water invasion and possible contamination from melted ice.
 - a. Take care to not damage or crack containers when packing.
12. Always use wet ice and a cooler temperature blank during transport to ensure samples arrive at the laboratory between 0° and 10° C.
 - a. Samples received frozen or above 10° C will be qualified and invalid for compliance reporting.
13. Keep drinking water samples separate from wastewater samples during transport.
14. Ensure that samples are received at the laboratory with at least half of the method required hold-time remaining to ensure samples are processed before expiration. The analysis of samples received with less than two hours of hold-time remaining cannot be guaranteed.