

## AIR, Test Code 1005-Total Bacterial Count with Identification

An air culture can be obtained by using a Surface Air Sampler (SAS) or by using an Anderson and pump. The media used for a bacterial culture is a Tryptic Soy Agar (TSA) plate. TSA can be used for both mesophilic bacteria and thermophilic actinomycetes. Plates are available thru Aerobiology for no additional charge if the media plates are returned to the lab for culture.

1. Calibrate each sampling pump by following manufacturer's recommendations.
2. Before each run, carefully and thoroughly wipe each sampler stage with rubbing alcohol. Allow to dry. Make sure air passages are not blocked.
3. Load sampling media into sampler, remove covers from media, and attach sampler to pump with flexible tubing or if using a SAS sampler just screw the top back onto the sampler.

NOTE: Take special care to prevent contamination of media during loading and unloading. Do not touch agar surface.

4. **Sample at known preset flow for an accurately known time, e.g., 5 min.** (In heavily contaminated areas, a shorter sampling time may be necessary.)
5. Replace covers on sampling media, unload, and pack securely for shipment (plates should be media side up).
6. If plates are going to be shipped back to the laboratory send them for overnight delivery in a cooler with an ice pack. If plates are not shipped that day keep the plates in the refrigerator until they are shipped the next day.

### References:

Dillon, H. Kenneth, L. Hung, J. Miller, Field Guide for the Determination of Biological Contaminants in Environmental Samples., 5.2.6.6:61, 7.1: 141-143 (2005).