

PLEASE READ BEFORE SAMPLING

Sampling Protocol for *Giardia* and *Cryptosporidium* by Method 1623 Sample filtered at laboratory.

This protocol satisfies sampling requirements for the following method:

Method 1623: *Cryptosporidium* and *Giardia* in Water by Filtration/IMS/FA; EPA 821-R-99-006

EQUIPMENT

1. 10 L carboy
2. Sample tap, unless grab sample is to be collected

Additional materials:

3. Turbidimeter (optional)
4. pH meter (optional)
5. Thermometer (optional)
6. Sanitary latex gloves
7. Frozen ice packs and cooler for shipping

SAMPLING LOCATIONS AND TIMING

Raw surface water should be sampled prior to any chemical addition. It is preferable to collect the sample after any presedimentation basins or recycled water additions, but only if no chemicals were added prior to this point. Sampling after recycle input should be taken after adequate in-line mixing.

Method 1623 was developed to determine the identity and concentration of *Cryptosporidium* and *Giardia* in untreated surface water. Other waters may be tested with slight modifications as recommended by CH Diagnostic.

SAMPLING PROCEDURE

1. Source water measurements

- Run sample tap for 2-3 minutes to clear in-line debris and allow turbidity to become uniform. Measure and record turbidity, temperature and pH of sample source (optional) on CH Diagnostic Analysis Request form.

2. Begin Sampling

- Record date, and time.

3. Sample the following amount

- EPA recommends: 10 L, with 2 samples collected the first time at each source for a matrix spike analysis and two samples collected every 20th sample thereafter.

7. End sampling

- Fill carboy to bottom of neck, and shut off water.
- Record turbidity (optional).
- **Record sample name on carboy with a permanent marker.**
- Sample may be refrigerated at 2-5°C. **DO NOT FREEZE.** Freezing may compromise test results.
- Samples must be received at CH Diagnostic within 24 hours of sample collection.

8. Ship sample

Place into insulated shipping container with ice packs. **DO NOT USE DRY ICE.** Avoid using wet ice whenever possible. Initial type of analysis to be performed on the CH Diagnostic Analysis Request form. Place completed form in zip-loc bag then in the container with carboy. Ship by **priority overnight** courier to CH Diagnostic.

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