

Plankton

QUANTITATIVE PLANKTON SAMPLING METHOD (MODIFIED STANDARD METHOD 1002A)

1. Anchor boat over sampling location and record the following information on the *Lake/Reservoir Field Data Sheet* (3800-FM-WSFR0050) available on DEP's website.

Station Number	Dissolved Oxygen profile (Hydrolab or equivalent)
Date	Temperature profile (Hydrolab or equivalent)
Time	Meteorological conditions
Water depth	Air temperature
Water transparency (Secchi Disk)	Wind speed/direction
	Percent cloud cover

2. Execute two vertical plankton tows with a simple conical or Wisconsin style net (5" diameter opening) rigged with No. 20 (80 micron) nylon mesh. Each tow should be initiated at lake bottom and traverse the entire water column at a rate of approximately 0.5 meters/second (hand retrieval speed).
3. Organisms collected are washed into the sample container after each tow. Both tows are composited into one sample preserved with Lugol's solution applied at the rate of one milliliter per 100 milliliters of sample.
4. Properly label sample and forward to the Bureau of Laboratories in Harrisburg via courier service. The sample should be accompanied by a completed Bacteriological Analyses form with the note "Plankton Sample" entered in the comment block.
5. Calculate the volume of lake water filtered during the two tows by multiplying (lake depth) x (2) x (area of plankton net opening) and enter that figure on the *Field Data Sheet Tissue Sampling* form.
6. Field observations, including the temperature and Dissolved Oxygen profile, should be forwarded to WSFR's Division of Water Quality Standards, within 30 days of sample collection.



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WATER STANDARDS AND FACILITY REGULATION
LAKE/RESERVOIR FIELD DATA SHEET

Lake Name _____ County _____

Station _____ Lat. _____ Long. _____

Date _____ Time _____ Collectors _____

Weather _____

Cloud Cover (%) 0 25 50 75 100 Comments (Hazy/Foggy)

Wind Conditions: None Light Moderate Heavy Direction _____

Rain Conditions: None Drizzle Light Moderate Heavy

Surface Turbulence _____

Air Temperature (°C) _____ Surface Area (acres) _____

Station Depth (meters) _____

SECCHI DISK READING (TENTHS OF A METER) _____

FIELD MEASUREMENTS

DEPTH (meter)	TEMP (°C)	D.O. (ppm)	pH	Sp. Cond. (Umhos)	DEPTH (meter)	TEMP (°C)	D.O. (ppm)	pH	Sp. Cond. (Umhos)
1M					11M				
2M					12M				
3M					13M				
4M					14M				
5M					15M				
6M					16M				
7M					17M				
8M					18M				
9M					19M				
10M					20M				

SAMPLES COLLECTED

TYPE	SAMPLE VOLUME	VOLUME FILTERED	TIME COLL.	COLL.# (SURFACE)	COLL.# (BOTTOM)
WATER QUALITY					
OTHER (blank/dup.)					
CHLOROPHYLL A					
PLANKTON TOW					

GENERAL COMMENTS:
