



Level 1 + Lake Profile Field Procedures

Please hold off going out if it is raining heavily (i.e., making it difficult to see the Secchi disk accurately), if there is abnormally high boat traffic, or if your safety would be at risk. A clear, calm day would be best.

STEP 1) Getting to Site

- Upon arrival, note any safety hazards or concerns and adjust plans as needed.
- It is important that the predetermined station is located so that the measurements collected can be compared with the water quality data collected by the Ministry. It is recommended to use a GPS or depth sounder.
- Before anchoring, check lake depth with calibrated rope/tape or depth sounder. Record depth to nearest 0.01 m or establish permanent buoy. If very calm, anchoring may not be necessary.
- Record the date, time, volunteer names, weather, and water conditions (refer to **Field Sheet**).

STEP 2) Lake Profile

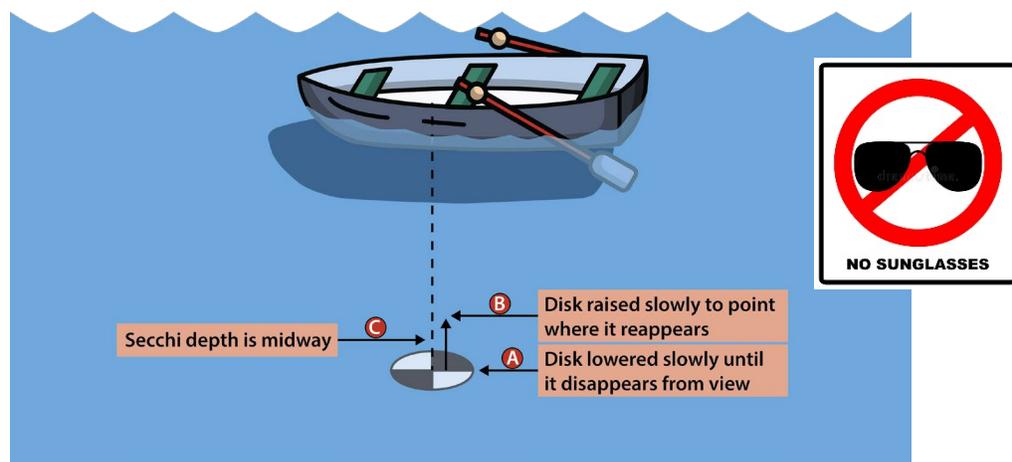


- Calibrate the YSI (Refer to “**How to Calibrate my YSI ProSolo ODO Meter**” for step-by-step instructions). To get accurate readings the meter depends on Barometric pressure, which varies daily, so the meter must be calibrated each time you sample. Record % DO reading at the end of calibration in the field sheet to help us determine whether the YSI probe needs servicing.
- Lower the YSI probe until the probe is submerged just below the surface. Wait at least one minute before reading your results to allow the readings stabilize. Record:
 - Temperature (to the nearest 0.01°C)
 - Dissolved oxygen (to the nearest 0.01 mg/L)
- Lower the probe to a depth of one metre and repeat, recording the values once they have stabilized.
- Continue to measure and record temperature and dissolved oxygen values at one metre intervals. The last measurement will be from a depth one metre above the measured lake bottom (to prevent sediments in sample) or until the probe cable has reached its maximum length.



STEP 3) Secchi Depth

- Lower the Secchi disk over the **shaded side** of the boat.
- **Slowly** lower the disk until the black and white pattern is no longer visible. Note the measurement on the tape measure (in metres) between the Secchi disk and the surface of the water (estimate to the nearest 0.01 m). Record this as Distance A.
- Pull the disk up until the black and white pattern **just** appears again and record this distance as Distance B.
- **Average the two measurements** $[(\text{Distance A} + \text{Distance B})/2] = \text{Secchi depth}$.



STEP 4) Check and Fill in the Remainder of the Form

Please fill in the entire form and note any observations while travelling to or while sampling at the site. This may include algal blooms, surface slicks, debris, pollen, zooplankton, fish kills, recent storm or high wind events, fishing derby's, water skiing competitions, etc. The data form has space for one site on the same water body. If you need more, please use a separate copy of the data form.

Once the sampling season is over, please send your completed field forms to the BCLSS office located at **1257 Erskine Street, Coquitlam, BC V3B 6R3** or by email to info@bclss.org. If you need assistance, please email or phone: **1-877-BCLAKES**.

**THANK-YOU FOR YOUR TIME AND COMMITMENT TO BC LAKES
HAPPY SAMPLING!**