



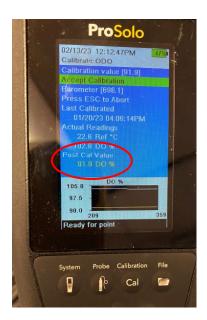
## Level 2 Field Procedures

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 (see Map). 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 the "Post Cal Value" % 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 sensor is submerged just below the surface of the water (the "0 m" reading). Wait at least one minute before recording your results to allow the readings stabilize.

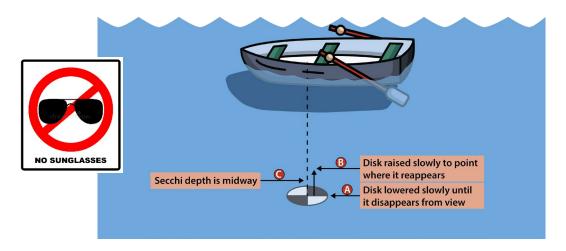
  Record:
  - Temperature (to the nearest 0.01°C)
  - Dissolved oxygen (to the nearest 0.01 mg/L) ← Not DO %
- Lower the probe to a depth of one metre and repeat, recording the values once they have stabilized.
- Continue to measure and record temperature and dissolved oxygen values at one metre intervals. The last measurement will be from a depth one metre above the measured lake bottom (to prevent sediments getting into the sensor) 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) at 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 note the measurement of the tape measure at surface of the water. Record this distance as Distance B.
- Average the two measurements [(Distance A + Distance B)/2] = 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.

If you need assistance with any of the above steps, please email <u>volunteerlakes@gov.bc.ca</u> or contact your Ministry representative.

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## STEP 5) Data Entry and End of Season Responsibilities

Following each sampling event and within 30 days of the season ending:

- Use the online Field Data Submission Tool to submit your data, available at
   www.gov.bc.ca/lakestewardshipmonitoring, including a photo of your field sheet. This allows us
   to screen incoming data as it arrives to ensure quality and completeness. Alternatively, you could
   arrange to either text photos to your Ministry contact or email volunteerlakes@gov.bc.ca. If you
   choose not to submit online, we ask that data is submitted using the standardized Level 2 excel
   worksheet provided (Excel sheet) and sent in on a regular basis.
- Finally, please return sampling equipment to the Ministry for maintenance, storage, and to update clipboards within 30 days of the final sampling event for the season (on an annual basis), unless otherwise arranged.

Purolator Account #: 8262063



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