Appendix 3: Dissolved Oxygen On-Lake Procedure Summary LaMotte Titration Kit

1. Using Van Dorn sampling bottle, collect water sample from the first depth assigned by CLMN coordinator (Refer to "Schedule for Chemistry, Temperature and Dissolved Oxygen Monitoring", page 4).
2. Select the D.O. bottle with the depth written on it that corresponds to the sample depth you are collecting. Remove cap. Run a small amount of water through the rubber tube of the Van Dorn sampling bottle to clean it.
3. Insert sampler hose to bottom of bottle. Overfill bottle at least two seconds.
4. Remove hose while water is still flowing to overflow the bottle.
5. Quickly cap the bottle.
6. Put on safety gloves and goggles.
7. Remove cap; add 8 drops of Manganous Sulfate solution from the squeeze bottle.
8. Add 8 drops of Alkaline Potassium Iodide Azide solution from the squeeze bottle.
9. Cap and invert 10-20 times to mix (more oxygen will make it darker brown).
10. Allow precipitate (the solid substance forming in the bottle) to settle halfway down the bottle.
11. Mix and invert another 10-20 times. Let the precipitate settle halfway down the bottle again.
12. Add 8 drops of Sulfuric Acid.
13. Cap the bottle and invert to mix. Continue inverting the bottle for several minutes until all of the precipitate has dissolved. Your sample is now "fixed." Place bottles in holder for on shore procedure (see on-shore procedures on page 66 through 71 of your manual).
14. Repeat steps 1 through 13 for each successive pre-selected depth (refer to "Schedule for Phosphorus, Chlorophyll, Temperature, and Dissolved Oxygen Monitoring", page 4).
15. Complete remaining analysis for all samples on shore (see on-shore procedures pages 66 through 71 of your manual).
16. Record data on Secchi & Chem form 3200-99.