Total Dissolved Gas

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1.1 Probe Preparation

1. Zero the probe at atmospheric pressure while dry.
2. Handle probe gently to ensure that the fragile membrane is not compromised.

1.2 Total Dissolved Gas (TDG) Measurement

1. Using the dry probe, check the barometric pressure (atm) and the temperature (^{o}C). Record.
2. Place the probe at the depth to be measured. Wait 12 minutes while gently agitating TDG probe cable to break up diffusion boundary layer. 12 minutes equilibration yields <3% error in the TDG measurement. Record the pressure and temperature. Note that waiting for a total of 15 to 20 minutes for a TDG membrane equilibration gives less than 1% error in the measurement.
3. Note that increases in TDG on the order to 0.1 atmospheres per meter of depth indicate that a hole has formed in the TDG membrane, and that the membrane needs to be replaced.
4. Simultaneously measure water pressure, e.g. using a hydrolab probe. Zero the water pressure probe above the water surface before using.