

**CALIBRATION WORK SHEET**

**Date of Calibration:** \_\_\_\_\_

Sonde SN: \_\_\_\_\_ Handpad SN: \_\_\_\_\_ Technician: \_\_\_\_\_

**Conductivity Calibration:** Date: \_\_\_\_\_ Technician: \_\_\_\_\_ Sonde SN: \_\_\_\_\_ Handpad SN: \_\_\_\_\_

| Conductivity Std. Being Used: | Cal. Standard<br>Adj. Cond<br>( $\mu\text{S/cm}$ ) | Pre-Calibration<br>Conductivity<br>( $\mu\text{S/cm}$ ) | Post-Calibration<br>Conductivity<br>( $\mu\text{S/cm}$ ) | Conductivity<br>Cell Constant<br>(Range 5.0 +/- .5) |
|-------------------------------|--|---|--|---|
| 1,000 $\mu\text{S/cm}$        | NA   | NA  |  |   |

**NOTES:**

**pH Calibration:** Date: \_\_\_\_\_ Technician: \_\_\_\_\_ Sonde SN: \_\_\_\_\_ Handpad SN: \_\_\_\_\_

|              | Cal. Standard<br>$^{\circ}\text{C}$ Adj. pH | Pre-Calibration<br>pH mV | Post-Calibration<br>pH mV |                        |
|--------------|---|--------------------------|---------------------------|------------------------|
| pH Buffer 7  |   |                          |                           | Range 0 MV $\pm$ 50 MV |
| pH Buffer 10 |   |                          |                           | Range -180 $\pm$ 50 MV |

Milli-volt span between pH 7 and 10 should be  $\approx$  165 to 180 MV  
 The ideal numbers when a probe is new are between 0 and 180, but as the probe begins to age, the numbers will move and shift to the higher side of the tolerance. The acceptable range for the slope is a span of 165 to 180. Once the slope drops below a span of 165, the sensor should be taken out of service if maintenance cannot bring it back into range.

**NOTES:** Cal. Constants (optional)  
 pH offset: \_\_\_\_\_  
 pH gain: \_\_\_\_\_

**Dis. Oxygen Calib:** Date: \_\_\_\_\_ Technician: \_\_\_\_\_ Sonde SN: \_\_\_\_\_ Handpad SN: \_\_\_\_\_

DO membrane changed? Y N Note: After membrane change, should wait 6 to 8 hours before final DO calibration, run sensor for 15 minutes in Discrete Run to accelerate burn-in.

Corrected\*  
 Barometric Pressure (Inches/Hg) x 25.4 = Barometric Pressure (mm/Hg) - [2.5\*(Altitude/100)] = **True Bar.Pres.** Pre-Calib. D.O. % Post-Calib. D.O. % DO Charge Range: 50 +/-25 DO Gain = 1 (Range: .7 to 1.5)

\_\_\_\_\_ x 25.4 = \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

**DISSOLVED OXYGEN SENSOR OUTPUT TEST (after DO calibration probe in saturated air)**  
 After calibration, did the DO % output display the proper declining high to low trend? If so, check \_\_\_\_\_ **ACCEPT**  
 ACCEPT. Should the output display a negative number or start at a low number and climb up to the calibration point, check REJECT and do not deploy the probe. \_\_\_\_\_ **REJECT**

**NOTES:** (End of Day D.O. calibration check: \_\_\_\_\_)

\*Generally weather service barometric pressure readings are corrected to sea level, and cannot be used until they are "uncorrected."

**Turbidity Calibration:** Date: \_\_\_\_\_ Technician: \_\_\_\_\_ Sonde SN: \_\_\_\_\_ Handpad SN: \_\_\_\_\_

| Turbidity Wiper Changed?                       | Y N | Cal. Standard<br>Entered Value<br>(FNU) | Pre-Calibration<br>Turbidity<br>(FNU) | Post-Calibration<br>Turbidity<br>(FNU) | Cal Constants (optional):<br>Turb offset: _____<br>Turb A1: _____<br>Turb M1: _____<br>Turb A2: _____ |
|--|-----|---|---------------------------------------|--|---|
| Wiper Parks $\sim$ 180 $^{\circ}$ from optics? | Y N | 0.0                                     |                                       |  |   |
|  |     | 123                                     |                                       |  |   |

**NOTES:**

## CALIBRATION WORK SHEET – DISSOLVED OXYGEN

**Dis. Oxygen Calib:** Date: \_\_\_\_\_ Technician: \_\_\_\_\_ Sonde SN: \_\_\_\_\_  
 Handpad SN: \_\_\_\_\_

DO membrane changed?    Y    N    Note: After membrane change, should wait 6 to 8 hours before final DO calibration, run sensor for 15 minutes in Discrete Run to accelerate burn-in.

Corrected\*

|                            |                                      |  |                   |                    |                              |                                |
|----------------------------|--------------------------------------|--|-------------------|--------------------|------------------------------|--------------------------------|
| Barometric Pressure        | Barometric Pressure                  | [Sea level correction] Local <b>True</b> | Pre-Calib. D.O. % | Post-Calib. D.O. % | DO Charge (Range: 50 +/- 25) | DO Gain = 1 (Range: .7 to 1.5) |
| (Inches/Hg) x 25.4 = _____ | mm/Hg - [2.5*(Altitude/100)] = _____ | <b>Bar.Pres.</b>                         | _____             | _____              | _____                        | _____                          |
| _____ x 25.4 = _____       | _____ - _____ = _____                |  |                   |                    |                              |                                |

**DISSOLVED OXYGEN SENSOR OUTPUT TEST (after DO calibration probe in saturated air)**  
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Corrected\*

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