

## CALIBRATION WORK SHEET

Date of Calibration: \_\_\_\_\_ Technician: \_\_\_\_\_  
 Sonde Model #: \_\_\_\_\_ Sonde Serial #: \_\_\_\_\_ Handpad Serial #: \_\_\_\_\_

DO membrane changed? Y N N/A Note: Wait 3 to 6 hours before calibrating for unattended deployments; run in  
 DO membrane o-ring changed? Y N N/A Discrete mode for 10 minutes to accelerate burn in. (Rapid Pulse DO Only)

Turbidity wiper changed? Y N N/A Wiper parks approx. 180° from optics: Y N Note: If parking problems occur,  
 ROX DO wiper changed? Y N N/A Wiper parks approx. 180° from optics: Y N the firmware may be out of date  
 and/or the wiper may be dirty.  
 Record sonde battery voltage: \_\_\_\_\_ (if applicable) Change wiper pad to see if it  
 Room Temperature \_\_\_\_\_ Sonde Temperature \_\_\_\_\_ resolves the issue.

**Record the following diagnostic numbers after calibration.**

	Temperature Adjusted Value	Record Calibration Values Before Cal      After Cal
Conductivity cell constant _____ <b>Range 5.0 ± 0.45</b> For 600R, QS, LS, and 600OMS sondes <b>Range 5.0 ± 0.70</b>	Conductivity	_____
pH mv Buffer 7 ** _____ <b>Range 0 ± 50 mv</b>	pH 7	_____
pH mv Buffer 10 ** _____ <b>Range -180 ± 50 mv</b> <i>**Note: Record pH mv reading <u>after</u> pH 7 and 10 calibration</i>	pH 10	_____
pH mv span* _____ <i>*Note: Millivolt span between pH 7 and 10 should be ≈ 165 to 180 mv</i>	Turbidity 0	_____
DO charge (RP only) _____ <b>Range 25 to 75</b>	Turbidity 126	_____
DO gain _____ <b>Range 0.7 to 1.4 for RP, 0.85 to 1.15 for ODO</b>	DO %	_____
Barometric Pressure _____	DO mg/L	_____
DO % Calculated _____ <i>(BARO mmHg divided by 7.6) = % saturation Example: 760 ÷ 7.6 = 100.0%</i>		_____

### DISSOLVED OXYGEN SENSOR OUTPUT TEST (600 Series sondes, done after calibration of DO probe)

The following test will confirm the proper operation of your DO sensor. The DO charge and gain must meet spec before proceeding.

- **650: SEE CALIBRATION PROCEDURES OF DISSOLVED OXYGEN**  
 Turn off the 650, wait 3-5 minutes. Place DO probe in saturated air environment and then turn on the 650. Go to the Run, Discrete sampling mode, and watch the DO% output (it must display a positive number and decrease with each 4 second sample, eventually stabilizing to the calibration value in approximately 60 to 120 seconds). Note: You can disregard the first two (4 second samples, they can be affected by the electronics warm-up.
- **The ACCEPT/REJECT criteria is as follows:** The DO output in % must start at a positive number and decrease during the warm-up. Example: 117, 117, 114, 113, 110, 107, 104, 102, 101, 100, 100. Should the output display a negative number or start at a low number and climb up to the cal point, the probe is rejected and must not be deployed. \_\_\_\_\_ **ACCEPT** \_\_\_\_\_ **REJECT**
- **End of day DO calibration check:** \_\_\_\_\_

### CALIBRATION STANDARDS

Standard	Vendor/Cat. Number	Lot Number	Expiration Date	Date Opened*
Conductivity				*Do not use if past 1 month
pH 7				*Do not use if past 6 months
pH 10				*Do not use if past 6 months
Turbidity				*Do not use if past 6 months

**Notes:** write any comments regarding anomalies encountered while calibrating below or on back of sheet