

# CALIBRATION WORK SHEET

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

Technician: \_\_\_\_\_

DO membrane changed?    Y    N

Note: Should wait 6 to 8 hours before final DO calibration, run sensor for 15 minutes in Discrete Run to accelerate burn-in.

Turbidity wiper changed?    Y    N

Wiper parks  $\approx 180^\circ$  from optics?    Y    N

Note: Change wiper if probe will not park correctly.

Chlorophyll wiper changed?    Y    N

Wiper parks  $\approx 180^\circ$  from optics?    Y    N

Note: Change wiper if probe will not park correctly.

Record battery voltage: \_\_\_\_\_

Record Calibration Values  
Actual                      After calibration

Record the following diagnostic numbers after/during calibration.

Conductivity cell constant _____	Range 5.0 $\pm .5$	Conductivity _____	
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pH MV Buffer 7 _____	Range 0 MV $\pm 50$ MV	pH 7 _____	
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pH MV Buffer 4 _____	Range +177 from 7 buffer MV	pH 4 _____	
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pH MV Buffer 10 _____	Range -177 from 7 buffer MV	pH 10 _____	
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NOTE: Span between pH 4 and 7 and 7 and 10 millivolt numbers should be  $\approx 165$  to 180 MV

ORP _____	
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NOTE: Check response time in buffer change & in Tap Water

DO charge _____	Range 50 $\pm 25$	Depth _____	
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DO gain _____	Range 1.0    .7 to 1.5	Turbidity _____	
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Pressure Offset _____	Range -14.7 $\pm 6$ (non-vented)	Chlorophyll _____	
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Pressure Offset _____	Range 0 $\pm 6$ (vented)	Chlorophyll _____	
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ORP mV Offset _____	Range 0 $\pm 100$	DO _____	
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## DISSOLVED OXYGEN SENSOR OUTPUT TEST (after DO calibration probe in saturated air)

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

**610/650**– Turn off the 610/650, wait 60 seconds. Power up 610/650 and go to the Run mode, 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 samples they can be affected by the electronics warm-up.

**PC** – Stop discrete and unattended sampling. Confirm that auto-sleep RS-232 is enabled (found in Advanced Menu under Setup). Wait 60 seconds. Start discrete sampling at 4 seconds. 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 samples they can be affected by the electronics warm-up.

The **ACCEPT/REJECT** criteria 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**

**Notes:**