

Full Calibration Log Sheet

Sonde ID: _____ Date: _____ Time: _____ Calibrator's Initials: _____
Battery Check (V): _____ Field User's Initials (if different from Calibrator): _____
Temperature (°C): _____ *Temperature must be recorded for all Calibrations
(even single probe calibrations)!*

DO Probe Calibration

Routine Maintenance Checklist:

1. *Check the age of the DO probe. It should be no more than 2 years old for 600 XL YSIs (5-7 years for 556 YSIs). First 3 characters of Serial # _____
Is it too old? ☐ Yes or ☐ No*
2. *Is the D.O. Membrane > 30 days old? ☐ Yes or ☐ No If so, it needs to be changed regardless of the amount of use it has seen.*
3. *For those sondes that have it, is the D.O. charge <100? ☐ Yes or ☐ No
If not, then resurface the probe's electrodes with sandpaper.*

Atmospheric Pressure (mm Hg): _____ ☐ New DO Membrane Installed
Initial % Sat: _____ Final % Sat: _____
Initial DO (mg/L): _____ Final DO (mg/L): _____ DO Charge: _____

Specific Conductance Probe Calibration

Routine Maintenance Checklist:

1. *For best accuracy, Specific Conductivity should be calibrated according to the expectations of the streams/sites you will be sampling. It may be necessary to recalibrate between streams/sites due to extreme differences between streams/sites (e.g., 1000 vs. 10000 $\mu\text{mhos/cm}$). Was Specific Conductance calibrated accordingly? ☐ Yes or ☐ No*
2. *Be sure to check the age of the Specific Conductivity probe. It should be no more than 3 years old. First 3 characters of Serial # _____
Is it too old? ☐ Yes or ☐ No*

Conductivity Solution ($\mu\text{mhos/cm}$): _____
Initial Sp Cond ($\mu\text{mhos/cm}$): _____ Final Sp Cond ($\mu\text{mhos/cm}$): _____
Low-End Sp Cond Check (i.e., <5 $\mu\text{mhos/cm}$)
Solution: ☐ Deionized or ☐ Distilled Water Sp Cond ($\mu\text{mhos/cm}$): _____
Monthly Mid-Range Sp Cond Check (e.g., 500 or 1000 $\mu\text{mhos/cm}$)
Conductivity Solution ($\mu\text{mhos/cm}$): _____ Sp Cond ($\mu\text{mhos/cm}$): _____

pH Probe Calibration

Routine Maintenance Checklist:

1. *Be sure to check the age of the pH probe. It should be no more than 12 to 18 months old. First 3 characters of Serial # _____*
Is it too old? ☐ Yes or ☐ No
2. *If the pH probe has electrodes that can be refreshed with new Reference Solutions and Tablets, check them to see if they need refreshed. Was new pH Reference Solution & Tablet Installed?* ☐ Yes or ☐ No

IMPORTANT: *If the streams/sites you will be sampling are expected to fall within the same pH range (i.e., 4-7 vs. 7-10), pH should be calibrated using a two-point calibration for best possible accuracy. Should a stream site fall outside of the calibrated pH range, then on-site recalibration is necessary. If expectations are unknown, use a three-point calibration.*

Initial pH (7): _____ Final pH (7): _____ mV (7): _____ (0 +/- 30 mV)

3. *The pH 7 mV should be in a range of +/- 30 mV. Between +/- 30-50 mV, the probe is still useable, but should be monitored closely for irregularities with the ranges of mV on the 10 and/or 4 buffer solutions. After +/- 50mV, the probe should no longer be used. Is the pH 7 calibration showing an acceptable range?* ☐ Yes or ☐ No

Initial pH (10): _____ Final pH (10): _____ mV (10): _____ (-180 +/- 30 mV)

Initial pH (4): _____ Final pH (4): _____ mV (4): _____ (+180 +/- 30 mV)

4. *Is the Nernst Equation (mV ranges) OK for all the calibration points?* ☐ Yes or ☐ No

Probe Maintenance Info

Probe Installed: ☐ New or ☐ Used Probe Type: ☐ pH ☐ DO ☐ Temp/Sp. Cond.

Probe Model #: _____ Probe S/N: _____

Calibration/Maintenance Notes: _____
