

Probe Sampling

Sources:

[DWQ Calibration, Maintenance, and Use of YSI Multiprobes SOP](#)

[DWQ Calibration, Maintenance, and Use of Multiparameter Water Quality Sondes SOP](#)

Calibrate at least once daily during use (G SOP)

Maintain on a regular maintenance schedule and on an as-needed basis

Reschedule or stop sampling if conditions are unsafe

ALWAYS keep the sensor guard on during use

The sonde should always be stored wet--if it will be a short period of time (a day or less), fill the calibration cup with no more than a ½ inch of tap water. For a storage period longer than a day, fill it with no more than ½ inch of pH4 buffer solution.

Make sure it is stored carefully for transport

Sondes should not be exposed to temperatures below 33F or above 122F(so don't leave in a hot car!)

Don't lower sondes into bottom sediments, and collect readings after any disturbed sediment has been cleared by the current or settled.

Supplies Needed:

- Copy of this SOP (can be on your phone)
- Copy of project-specific SAP (on your phone)
- Sonde
- Charging cables
- Maintenance tool kit
- Tap water
- DI water
- pH calibration standard solutions (7 and 10)

- Lint-free cloth (kimwipes)
- Handheld
- Field laptop

Before trip:

- Review the SAP to confirm sampling locations and target conditions
- Charge the handhelds and field laptop
- Calibrate in the morning before sampling and anytime there is a reading that's unusual

At the sampling site:

- Remove calibration cup
- Lower the sonde into the water UPSTREAM of any other sampling activity
- Avoid laying the sonde in bottom sediments
- Observe the water quality readings displayed on the handheld to make sure they're reasonable
- Record the readings on the Trip Sheet to use as back up and for QA

After sampling, rinse the sonde with clean tap water and store the sensors in tap water or pH4 buffer. Do NOT store in DI water, do NOT allow sensors to dry out, and do NOT allow storage medium to freeze around the sensors.

I think we're not gonna worry about recalibrating in the field if there's a bad reading, we'll just go back to the lab or reschedule sampling

After Sampling Trip

- Download data from PDR
- Format the parameters into the DWQ hydrofile format
- Verify that values, site IDs, and sample date are accurate

Weekly Maintenance:

- Clean sondes with soap and water. Clean casing with a sponge and sensors with an extra soft toothbrush and cotton swabs. Clean calibration cups and sensor guards with soap and water.

Monthly Maintenance

- Soak sensors and sensor guards in vinegar for 20 minutes if hard water stains are present. Clean the outside of all sensors with isopropyl alcohol, except the LDO sensor, which should be cleaned only with soap.