Pre-Measurement Calibration
Water Quality Instrument Record
California Department of Water Resources

Instrument ID: THR-10

Discrete: ☐ **Real Time:** ☑ **Performed by (Last Name):** Poier **Date of Calibration:** 04/03/2023

Site/Run to be used on: TRB deploy **Time of Calibration (PST):** 09:15

Attachment(s)? ☐

Verifcation Instruments	
NIST Thermometer S/N	221360763
Therm. Cal. Due Date	03/18/2024
Turbidimeter S/N	N/A, 6073G beads
Turbidmeter Cal. Due Date	
Barometer S/N	CP307754
Barometer Cal. Due Date	09/21/2022

Calibration Standards	Lot #	Expiration Date
Turbidity Std.	21L21430190	11/01/2022
Conductance Std.	36176	10/31/2022
EC Std.	36179	10/31/2023
7 pH Std.	2052C	02/24/2024
4 pH Std.		
10 pH Std.	2056B	03/07/2023

Calibration (to be completed within 72 hours before measurement)

Followed standard operating procedures version: _____

** Use pH Standard vs. Temperature Table or calculator*
***DO %Sat = Local barometric pressure / 7.6*
***Use Dissolved Oxygen Lookup Table (DOLT) or calculator

Parameter	Standard	Pre-Cal	Post-Cal	Additional Info.	Passing Criteria
Specific Conductance (µS/cm) Dry	0	0			< 2 µS/cm
Temperature (°C) in Water	NIST Thermometer 20.71	20.62			≤ ± 0.20 °C
Chlorophyll (RFU) in DIW	0.00	--			< 0.10 RFU
Chlorophyll (µg/L) in DIW	0.00	--			< 0.10 µg/L
Blue Green Algae (RFU) in DIW	0.00	--			< 0.10 RFU
Blue Green Algae (µg/L) in DIW	0.00	--			< 0.10 µg/L
Turbidity (NTU) in DIW - Low	0.0	0.08	0.0		≤ ± 0.5 NTU
Turbidity (NTU) in Std - High	124	124.27	124.0		≤ ± 5%
Specific Conductance (µS/cm) in Std	24820	24808	24819.8	Cell Constant: 5.19	≤ ± 3%
7 pH (units)	* 7.02	7.00	7.02	-27.2 mV	≤ ± 0.2 units
4 pH (units)	* --	--	--	mV	≤ ± 0.2 units
10 pH (units)	* 10.05	10.06	10.05	-200.1 mV	≤ ± 0.2 units
Dissolved Oxygen (%sat)	** 100.4	100.1	100.1	Baro. Pres. (mmHg): 763.2	≤ ± 5%
Dissolved Oxygen (mg/L)	*** 9.46	9.41	9.42	Temp. (°C) in bucket: 18.26	≤ ± 0.3 mg/L
Dissolved Oxygen (Gain)			ODO Gain 1.03	0.87-1.25 range ideal	n/a

Delta slope (pH 7 mV - pH 10 mV): 172.9 [Ideal range 160-180 mV, replace module if slope ≤ 155 mV]

Wiper activated during calibration: ☑

1. Calibrate depth to 0 feet: ☑
2. Verify sufficient battery voltage for use: ☑
3. Verify wiper is parked correctly & working: ☑
4. Verify or set date & time (Time.gov): ☐

Day of Deployment:

1. Verify DO %sat ≤ ± 5% (recommended): ☑
2. Verify parameters & reporting: ☑
3. Sonde started and ready for measurement: ☑

Comments:

Date & Time (PST) of Deployment (RTM) / First Measurement (Discrete): 04/04/2023 0815