

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there are qualified data on this page.

Meter ID: 2019-12-09-03

RQ: 2019-12-09-03

Project: CALWASA LONG TERM

- Notes: (1) Always wait for meter to stabilize before recording any readings.
 (2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 10/1/19

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	BARRINGTON	12/12/19	0715	23.0	760.5	8.6	8.59	100.1	—	1.28	P/F	L/F
ICV	↓	↓	0718	23.0	760.5	8.6	8.60	100.2	—	—	P/F	L/F
CCV	Chris Hornuth	12/12/19	1613	25.1	758.1	8.2	8.35	101.2			P/F	L/F
CCV											P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15 (Pro DSS 0.75 to 1.50); DO charge N/A. Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	BARRINGTON	12/12/19	0731	2904A78	3/21	10000	10000	P/F	L/F
ICV	↓	↓	0734	2907016	7/21	1000	1001	P/F	L/F
CCV	Chris Hornuth	12/12/19	1614	2909C48	09/21	50000	49403	P/F	L/F
CV			1618	2908C81	08/21	100	103.5	P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	BARRINGTON	12/12/19	0737	194516	7/21	7.00	24.3	7.01	-44.8	P/F	L/F
Calibr.			0738	194900	7/21	4.00	24.0	4.00	14.3	P/F	L/F
Calibr.			0733	193874	6/21	10.02	23.9	10.01	-22.1	P/F	L/F
ICV	↓	↓	0736	194900	7/21	4.00	24.9	3.99	—	P/F	L/F
CCV	Chris Hornuth	12/12/19	1620	191735	04/21	10.023	24.0	10.05		P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 179.3, slope from 4 to 7 181.1 (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)
 If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification:
 If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3312B; Date of last verification: 6/18/19

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air						P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS: