

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: Scuba bucket

RQ: 2022-11-14-26

Project: SNP

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 8/26/2022

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Barometer mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Andrew Lueking	11/14/22	808	24.4	762	8.4	8.38	100.3	-	1.05	P/F	L/F
ICV	"	"	810	24.5	762	8.4	8.37	100.1	-	1.05	P/F	L/F
CCV	"	"	1416	23.3	761	8.5	8.57	100.5	-	1.05	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Lueking	11/14/22	812	22072SL	8/2023	1000	1000	P/F	L/F
ICV	"	"	815	220328C	4/2023	100	102.3	P/F	L/F
CCV	"	"	1419	211266F	11/2023	50,000	49,605	P/F	L/F
CCV								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.	Andrew Lueking	11/14/22	817	217879	12/2023	7.0	25.2	7.00	-44.2	P/F	L/F
Calibr.	"	"	820	22072SA	2/2024	4.0	25.1	4.01	125.0	P/F	L/F
Calibr.	"	"	822	207460	2/2023	10.0	25.1	10.00	219.2	P/F	L/F
ICV	"	"	828	207460	2/2023	10.0	25.1	9.98	-216.7	P/F	L/F
CCV	"	"	1421	22072SA	2/2024	4.0	24.2	2.26	230.0	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 10 173, slope from 4 to 7 171.2 (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: 8/26/2022

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

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	Andrew Lueking	11/14/22	830	0.00	0.00	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:

"J" quality pH measurements