

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: Craw Daddy

RQ: 2023-11-04-23

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 9/28/23

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.	Victoria Schwartz	11/8/23	8:30	22.4	760.5	8.7	8.68	100.1	✓	0.94039	P/F	L/F
ICV			7:36	22.5	760.5	8.7	8.67	100.1	✓		P/F	L/F
CCV	Katie March		1550	24.6	758.4	8.3	8.34	100.2	✓		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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Victoria Schwartz	11/8/23	7:38	4306L79	06/25	1000	1000	P/F	L/F
ICV			7:44	2207G95	07/24	100	99.9	P/F	L/F
CCV	K March		1554	2207G95	7/24	100	100.8	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.	Victoria Schwartz	11/8/23	7:50	231678	05/25	7.01	22.4	7.01	-21.8	P/F	L/F
Calibr.			7:56	231208	03/25	4.00	22.6	4.00	152.1	P/F	L/F
Calibr.			7:59	231472	01/25	10.02	22.6	10.02	-197.3	P/F	L/F
ICV			8:03	231208	03/25	4.00	22.7	3.91	162.3	P/F	L/F
CCV	K March		1557	231208	3/25	4.00	22.6	4.08	152.5	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 10 175.5, slope from 4 to 7 178.9 (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: 9/28/23

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: knothead; Date of last verification: 5/17/23

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	Victoria Schwartz	11/8/23	8:10	0.272	0.274	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:

updated meter time

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: Shnmp Trap

RQ: 2023-08-07-87

Project: HAB

- 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 9/28/23

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.	Victoria Schwartz	11/8/23	7:34	22.4	760.7	8.7	8.69	100.1		0.9891	P / F	L / F
ICV			7:40	22.4	760.7	8.7	8.69	100.1			P / F	L / F
CCV	Denver Barossa		1233	22.7	759.9	8.6	8.64	100.3			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.	Victoria Schwartz	11/8/23	7:41	4306279	06/25	1000	1000	P / F	L / F
ICV			7:46	2207995	07/24	100	100.1	P / F	L / F
CCV	Denver Barossa		1236				100.3	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.	Victoria Schwartz	11/8/23	7:49	231678	05/25	7.01	22.6	7.01	-55.1	P / F	L / F
Calibr.			7:53	231208	03/25	4.00	22.6	4.00	123.5	P / F	L / F
Calibr.			7:56	231472	07/25	10.02	22.6	10.02	-231.8	P / F	L / F
ICV			8:06	231208	03/25	4.00	22.6	3.85	132.2	P / F	L / F
CCV	Denver Barossa		1238	231472	07/25	10.04	22.4	9.99	-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 10 176.7, slope from 4 to 7 178.6 (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: 9/28/23

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Light; Date of last verification: 5/17/23

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	Victoria Schwartz	11/8/23	8:12	0.272	0.273	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:

Updated meter time