

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: SWD

RQ: 2022-05-02-69

Project: SMP

- 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 03/31/22

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.	K. Grace	5/9/22	716	22.0	760	8.7	8.72	100.6	-	1.004	P / F	L / F
ICV			721	22.2	760	8.7	8.71	100.0	-	-	P / F	L / F
CCV	D. Mathias		1536	25.7	760	8.4	8.40	98.7	-	-	P / F	L / F
CCV						8.2	8.05				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.	K. Grace	5/9/22	725	2201639	01/24	1.000	998	P / F	L / F
ICV			728	2203723	03/24	100	98.4	P / F	L / F
CCV	D. Mathias		1545	1111697	10/23	50,000	51185	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 μ S	Pass / Fail	Lab / Field
Calibr.	K. Grace	5/9/22	731	213013	04/23	7.01	22.2	7.14	51.6	P / F	L / F
Calibr.			742	214220	06/23	4.00	22.7	4.18	13.4	P / F	L / F
Calibr.			748	213755	06/23	10.03	22.6	10.20	252.7	P / F	L / F
ICV			751					10.03	-	P / F	L / F
CCV	D. Mathias		1550	213013	04/23	7.00	21.2	7.01	-	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 ± 50 ; mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 176.0, slope from 4 to 7 170.1 (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: Secchi 3

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 03/31/2022

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:

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: CHERRY

RQ: 2022-05-02-34

Project: SMP RUN 19

- 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 3/31/22

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.	M. Maloney	5-9-22	7:25	22.0	759.0	8.7	8.75	100.1	-	1.008	P / F	L / F
ICV	M. Maloney	5-9-22	7:27	22.1	759.6	8.7	8.77	100.9	-	-	P / F	L / F
CCV	M. Maloney	5-9-22	15:58	25.7	760.0	8.2	8.49	104.0	-	-	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.	M. Maloney	5-9-22	7:30	2201G39	01/24	1000	1000	P / F	L / F
ICV	M. Maloney	5-9-22	7:32	2203F23	03/24	100	100.3	P / F	L / F
CCV	M. Maloney	5-9-22	10:00	2007D74	07/22	500	501	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.	M. Maloney	5-9-22	7:30	213013	04/23	7.02	21.5	7.02	-101.1	P / F	L / F
Calibr.	M. Maloney	5-9-22	7:38	214220	06/23	4.00	21.7	4.00	66.6	P / F	L / F
Calibr.	M. Maloney	5-9-22	7:41	213755	06/23	10.04	21.5	10.04	-207.9	P / F	L / F
ICV	M. Maloney	5-9-22	7:41	213755	06/23	10.0	21.5	10.03	-	P / F	L / F
CCV	M. Maloney	5-9-22	10:05	213013	04/23	7.0	21.0	7.19	-	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 10 166.8, slope from 4 to 7 167.7 (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: Saber 3; Date of last verification: 03/31/2022

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: