

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- 2022-02-21-34

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 1/3/22

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	2-22-22	7:31	21.4	766.9	8.9	8.92	100.9	-	1.009	P/F	L/F
ICV	M. Maloney	2-22-22	7:33	21.5	767.1	8.9	8.90	100.9	-	-	P/F	L/F
CCV	K. Grace	1	1324	24.5	765.9	8.4	8.29	99.4	-	-	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	2-22-22	7:37	1111994	11/23	1000	999	P/F	L/F
ICV	M. Maloney	2-22-22	7:40	2109K87	09/23	100	97.8	P/F	L/F
CCV	K. Grace	1	1327	200074	07/22	500	500	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	2-22-22	7:45	213013	04/23	7.02	21.0	7.02	-37.3	P/F	L/F
Calibr.	M. Maloney	2-22-22	7:46	214220	06/23	4.00	21.0	4.00	142.9	P/F	L/F
Calibr.	M. Maloney	2-22-22	7:48	210276	02/23	10.05	21.0	10.05	-211.8	P/F	L/F
ICV	M. Maloney	2-22-22	7:50	210276	02/23	10.00	21.0	10.02	-210.3	P/F	L/F
CCV	K. Grace	1	1331	214220	06/23	4.0	21.9	4.10	-	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 10 174.5, slope from 4 to 7 180.2 (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: 01/03/2022

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Secchi #3; Date of last verification: 01/03/2022

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)

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Meter ID:

Leia

RQ-

2022-02-21-39

Project:

Align Brown/CM

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 01/03/2022

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.	S Meyer	02/22/22	0900	21.8	767.2	8.9	8.87	100.9	—	0.96276	P / F	L / F
ICV	↓	↓	0905	21.7	767.2	8.9	8.90	101.3	—	—	P / F	L / F
CCV	↓	↓	1435	23.3	764.6	8.6	8.64	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	S Meyer	02/22/22	0910	2110H35	10/23	10000	10000	P / F	L / F
ICV	↓	↓	0913	1111994	11/23	1000	1017	P / F	L / F
CCV	↓	↓	1441	2109A45	08/23	50000	50041	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.	S Meyer	02/22/22	0916	213013	04/23	7.02	21.3	7.02	-16.8	P / F	L / F
Calibr.	↓	↓	0920	214220	06/23	4.00	21.3	4.00	159.9	P / F	L / F
Calibr.	↓	↓	0924	210276	02/23	10.05	21.4	10.04	-115.0	P / F	L / F
ICV	↓	↓	0929	210276	02/23	10.05	21.2	9.98	-190.3	P / F	L / F
CCV	↓	↓	1446	213013	04/23	7	21.2	7.07	-19.9	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 10 178.2, slope from 4 to 7 176.7 (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: 01/03/2022

If NO, what will be used? (circle one) **Secchi Disk Line** / Sonar Unique ID: #3; Date of last verification: 01/03/2022

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: