

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: 2022-02-21-38

Project: SMP RUN 110

- 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	3-10-22	8:45	23.9	759.6	8.4	8.42	100.0	-	1.01	P / F	L / F
ICV	M. Maloney	3-10-22	8:46	23.9	759.6	8.4	8.38	99.9	-	-	P / F	L / F
CCV	M. Maloney	3-10-22	15:23	21.4	759.4	8.8	8.90	100.7	-	-	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	3/10/22	8:58	210994	4/23	1,000	1000	P / F	L / F
ICV		3/10/22	8:59	21091087	9/23	100	101.5	P / F	L / F
CCV	M. Maloney	3-10-22	15:30	2107074	07/22	500	475.2	P / F	L / F
CCV	M. Maloney	3-10-22	15:30	2109445	08/23	500	470.2	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.	Beckman	3/10/22	9:02	213013	4/23	7.	24.2	7.00	-36	P / F	L / F
Calibr.			9:04	214820	6/23	4.	24.2	4.06	140	P / F	L / F
Calibr.			9:08	210276	2/23	10.	23.6	10.00	-216	P / F	L / F
ICV			9:10	210276	2/23	10.0	23.6	9.99	-215	P / F	L / F
CCV	M. Maloney	3-10-22	15:25	213013	04/23	7.00	24.4	7.08	-42.7	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 10 180, slope from 4 to 7 176 (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: 1/3/22

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 1/3/22

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: Exo

RQ: 2022-02-21-39

Project: Cont. Monitoring

- 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	03/10/22	0915	24.8	760.1	8.3	8.30	100.0	—	1.06366	(P) F	(L) F
ICV	↓	↓	0917	24.798	760.4	8.3	8.31	100.1	—	—	(P) F	(L) F
CCV	K. Grace	3/17/22	1534	23.6	760.4	8.8	8.51	96.5	—	—	(P) F	(L) F
CCV				21.6							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	03/10/22	0922	2110435	10/2023	10000	10000	(P) F	(L) F
ICV	↓	↓	0931	2105835	04/2023	5000	5001	(P) F	(L) F
CCV	K. Grace	3/17/22	1556	1107B73	07/23	70000	70,117	(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	03/10/22	0935	213013	04/2023	7.00	24.43	7.01	-29.9	(P) F	(L) F
Calibr.	↓	↓	0940	214220	06/2023	4.00	24.4	4.00	144.6	(P) F	(L) F
Calibr.	↓	↓	0946	210276	02/23	10.01	23.9	10.01	-204.1	(P) F	(L) F
ICV	↓	↓	0950	210276	02/2023	10	23.7	9.99	-202.7	(P) F	(L) F
CCV	K. Grace	3/17/22	1559	214220	06/23	4.00	22.4	4.19	—	(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 10 174.2, slope from 4 to 7 174.5 (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: #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: