

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: CEAW BADDY

RQ: 2022-01-31-21

Project: 5mP

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 12/2/21

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.	Terry Riordan	2/3/22	0741	22.2	758.0	8.7	8.68	99.7	/	0.961	P/F	L/F
ICV			0742	22.2	758.1	8.7	8.68	99.7	/	/	P/F	L/F
CCV	Terry Riordan		1408	23.7	757.0	8.4	8.58	101.4	/	/	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Terry Riordan	2/3/22	0746	210127B	2/22	1000	1000	P/F	L/F
ICV			0749	2109K87	9/23	180	100.5	P/F	L/F
CCV	Terry Riordan		1411	2/23	1103983	10,000	10020	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.	Terry Riordan	2/3/22	0758	210792	2/23	7.01	22.1	7.01	-106.5	P/F	L/F
Calibr.			0803	210273	2/23	4.00	22.0	4.00	57.3	P/F	L/F
Calibr.			0809	207370	3/23	10.04	22.1	10.04	-274.9	P/F	L/F
ICV			0811	207370	3/23	10.04	22.1	10.05	-274.4	P/F	L/F
CCV	Terry Riordan		14	210273	2/23	4.00	22.5	4.24	45.3	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 10 168.4, slope from 4 to 7 163.8 (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: 12/2/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Knot head; Date of last verification: 12/1/21

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	Terry Riordan	2/3/22	0811	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:

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

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Meter ID: Shriving Trap

RQ: 2022-01-31-21

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 12/2/21

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.	Terry Riordan	2/3/22	0738	22.0	758.0	8.7	8.72	99.7	/	1.051	P/F	L/F
ICV			0739	22.0	758.0	8.7	8.72	99.8	/	/	P/F	L/F
CCV	Lz Bates	2/3/22	12:07	21.9	758.4	8.7	8.83	100.8	/	/	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Terry Riordan	2/3/22	0746	210127B	2/22	1000	1000	P/F	L/F
ICV			0749	2109K87	9/23	100	98.9	P/F	L/F
CCV	Lz Bates	2/3/22	12:10	2109K87	9/23	100	99.8	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.	Terry Riordan	2/3/22	0757	210792	2/23	7.01	22.1	7.01	-88.3	P/F	L/F
Calibr.			0802	210273	2/23	4.00	22.1	4.00	-88.7	P/F	L/F
Calibr.			0807	207370	3/23	10.04	22.2	10.04	-268.6	P/F	L/F
ICV			0809	207370	3/23	10.04	22.2	10.03	-267.8	P/F	L/F
CCV	Lz Bates	2/3/22	12:15	210792	2/23	7.01	22.3	7.03	-90.2	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 10 180.3, slope from 4 to 7 177.0 (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: 12/2/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: light; Date of last verification: 12/1/21

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	Terry Riordan	2/3/22	0809	0.272	0.271	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: SCUD Bucket

RQ: 2022-01

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 12/2/21

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.	Terry Riordan	2/3/21	0825	22.4	758.5	8.7	8.66	99.8	/	1.24	P/F	L/F
ICV		1	0827	22.5	758.5	8.6	8.66	99.9	/		P/F	L/F
CCV	Katie Murch	2/3/22	1545	21.9	756.5	8.7	9.41	107.9	/		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.	Terry Riordan	2/3/21	0832	2101278	2/22	1000	1000	P/F	L/F
ICV		1	0833	2109K87	9/23	100	99.9	P/F	L/F
CCV	Katie Murch	2/3/22	1537	2109K87	9/23	100	99.4	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.	Terry Riordan	2/3/21	0837	210792	2/23	7.01	22.2	7.01	-23.7	P/F	L/F
Calibr.			0841	210273	2/23	4.00	22.1	4.00	153.3	P/F	L/F
Calibr.			0847	207370	3/23	10.04	22.1	10.04	-198.7	P/F	L/F
ICV			0848	207370	3/23	10.04	22.1	10.04	-198.8	P/F	L/F
CCV	Katie Murch	2/3/22	1542	210273	2/23	4.00	22.5	4.07	149.6	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 10 175.0, slope from 4 to 7 177.0 (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: 12/2/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Crusty; Date of last verification: 12/1/21

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	Terry Riordan	2/3/21	0848	0.272	0.271	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: