

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: SC417

RQ: 2022-03-07-25

Project: BMAP

Bucket

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 3/3/22

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.	Terry Riordan	3/7/22	0716	23.2	758.4	8.5	8.54	99.8	/	1.039	P/F	L/F
ICV			0718	23.2	758.5	8.5	8.54	99.9	/	/	P/F	L/F
CCV	Katie March		1430	23.2	756.4	8.5	8.48	99.3	/	/	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Terry Riordan	3/7/22	0726	1105E62	5/23	1000	1000	P/F	L/F
ICV			0730	2109K87	9/23	100	99.1	P/F	L/F
CCV	Katie March		1430	1103983	2/23	10,000	9,948	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	3/7/22	0739	210792	2/23	7.00	23.4	7.00	-30.2	P/F	L/F
Calibr.			0743	210273	2/23	4.00	23.6	4.00	146.4	P/F	L/F
Calibr.			0749	207370	3/23	10.02	22.8	10.02	-203.5	P/F	L/F
ICV			0752	207370	3/23	10.02	22.8	10.00	-202.8	P/F	L/F
CCV	Katie March		1440	210273	2/23	4.00	23.3	4.06	142.5	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 10 173.3, slope from 4 to 7 176.6 (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: 3/3/22

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	3/7/22	0752	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)

Boldly "X" this box if there are qualified data on this page.

Meter ID: CRAWPADDY

RQ: 2022-03-07-21

Project: SM?

- 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 3/3/22

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.	Terry Riordan	3/2/22	0717	23.3	758.2	8.5	8.51	99.8	/	0.960	P/F	L/F
ICV			0719	23.3	758.5	8.5	8.51	99.8	/	/	P/F	L/F
CCV	Terry Riordan		1406	26.0	756.6	8.1	8.20	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.	Terry Riordan	3/7/22	0726	1105E62	5/23	1000	1000	P/F	L/F
ICV			0730	2109K87	9/23	100	98.2	P/F	L/F
CCV	Terry Riordan		1408	2109K87	9/23	100	98.0	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	3/7/22	0738	210792	2/23	7.01	23.4	7.01	-13.8	P/F	L/F
Calibr.			0744	210273	2/23	4.00	23.4	4.00	163.8	P/F	L/F
Calibr.			0750	207370	3/23	10.02	22.8	10.02	-187.7	P/F	L/F
ICV			0753	207370	3/23	10.02	22.8	10.00	-187.0	P/F	L/F
CCV	Terry Riordan		1411	210274	2/23	4.00	23.4	4.04	161.0	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 10 173.9, slope from 4 to 7 177.6 (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: 3/3/22

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Knothead; 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	3/7/22	0753	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: