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

2021-11-29-09

Meter ID: Shrimp Trap RQ- 2021-08-02-50 Project: SMP BMAP

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

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 9/3/21

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.	Inbates	11/29/21	8:25	21.5	760	8.8	8.78	99.5	/	1.057	P F	L F
ICV	1	1	1	21.5	760.2	8.8	8.78	99.5	/	/	P F	L F
CCV	Inbates	11/29/21	15:50	22.2	754.2	8.6	9.04	103.7	/	/	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Inbates	11/29/21	8:50	210278	02/22	1000	1000	P F	L F
ICV	1	1	1	210K89	9/23	100	99.0	P F	L F
CCV	Inbates	11/29/21	15:55	1103983	2/23	10,000	9782	P F	L F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 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.	Inbates	11/29/21	8:35	210792	2/23	7.02	21.2	7.02	-77.1	P F	L F
Calibr.	1	1	1	210273	2/23	4.00	21.0	4.00	101.8	P F	L F
Calibr.	1	1	1	207370	3/23	10.05	21.0	10.05	-257	P F	L F
ICV	1	1	1	210273	2/23	4.00	21.0	4.00	102.0	P F	L F
CCV	Inbates	1	15:59	210792	2/23	7.02	21.3	7.07	-80.3	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 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 180.0, slope from 4 to 7 178.9 (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: 9/3/21
If **NO**, what will be used? (circle one) **Secchi Disk Line / Sonar** Unique ID: light ; Date of last verification: 6/4/21

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	Inbates	11/29/21	9:10	0.272	0.272	P F	L F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:
* DO FAIL

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: CrawDaddy RQ- 2021-11-29-04 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 9/3/21

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.	Mbates	11/29/21	8:25	21.4	756.1	8.8	8.81	99.6	/	1.025	P/F	L/F
ICV	"	"	"	21.4	756.2	8.8	8.81	99.7	/	/	P/F	L/F
CCV	Mbates	11/29/21	16:36	22.0	754.3	8.7	9.33	106.7	/	/	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Mbates	11/29/21	8:50	210127B	2/22	1000	1000	P/F	L/F
ICV	Terry Riordan	"	"	2109K87	9/23	100	99.0	P/F	L/F
CCV	Mbates	"	15:52	1103583	2/23	10,000	9914	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria ± 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.	Mbates	11/29/21	8:35	210792	2/23	7.02	21.1	7.02	-74.3	P/F	L/F
Calibr.	"	"	"	210273	2/23	4.00	21.0	4.00	102.4	P/F	L/F
Calibr.	"	"	"	207370	3/23	10.05	20.9	10.05	-253.1	P/F	L/F
ICV	"	"	"	210273	2/23	4.00	20.9	4.00	102.4	P/F	L/F
CCV	"	"	15:55	210792	2/23	7.01	21.5	7.08	-78.4	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 10 178.8, slope from 4 to 7 176.3 (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: 9/3/21
If **NO**, what will be used? (circle one) **Secchi Disk Line / Sonar** Unique ID: Knothead; Date of last verification: 6/4/21

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	11/29/	8:52	0.272	0.273	P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS: * DO failed