

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

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

Meter ID: B60P-NON RQ: 2018-06-18-34 Project: SMF

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.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 6/1/18

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Mike Drennan	6/18/18	7:10	23.43 71.0	8.514	8.51	100.0	53.3	1.0414	(P) F	(L) F
ICV				23.41	8.514	8.51	99.8	53.3		(P) F	(L) F
CCV										P / F	L / F
CCV	Liz Bates		12:57	23.0	8.58	8.58	100.1	53.3	1.0414	(P) F	(L) F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

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.				180312B	03/19	1000	1000	(P) F	(L) F
ICV				180312A	03/19	100	99	(P) F	(L) F
CCV								P / F	L / F
CCV	Liz Bates		12:57	180312A	03/19	100	96	(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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.				172189	04/19	7.0	7.00	-20.0	(P) F	(L) F
Calibr.				174044	08/19	4.0	4.00	157.1	(P) F	(L) F
Calibr.				174507	09/19	10.0	9.99	-195.0	(P) F	(L) F
ICV				176044	08/19	4.0	3.97	158.7	(P) F	(L) F
CCV									P / F	L / F
CCV	Liz Bates		12:57	176507	09/19	10.0	10.09	-200.3	(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 7 177.1 (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification

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:

New batteries & D.O. membrane

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

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Meter ID: BETTY 107

RQ- 2018-06-11-48

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.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site _____

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	<u>Leaf Bowman</u>	<u>6/18/18</u>	<u>8:45</u>	<u>22.88</u>	<u>8.595</u>	<u>8.60</u>	<u>100.0</u>	<u>53.3</u>	<u>1.01859</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>1</u>	<u>1</u>	<u>1</u>	<u>22.90</u>	<u>8.595</u>	<u>8.60</u>	<u>100.1</u>	<u>53.3</u>		<u>P/F</u>	<u>L/F</u>
CCV	<u>1</u>	<u>1</u>	<u>15:30</u>	<u>23.12</u>	<u>8.562</u>	<u>8.64</u>	<u>100.3</u>	<u>53.3</u>	<u>1.01859</u>	<u>P/F</u>	<u>L/F</u>
CCV										<u>P/F</u>	<u>L/F</u>

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

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.	<u>Leaf Bowman</u>	<u>6/18/18</u>	<u>8:45</u>	<u>180312 B</u>	<u>03/19</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>1</u>	<u>1</u>	<u>1</u>	<u>180312A</u>	<u>03/19</u>	<u>100</u>	<u>100</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>1</u>	<u>1</u>	<u>15:30</u>	<u>180312A</u>	<u>03/19</u>	<u>100</u>	<u>100</u>	<u>P/F</u>	<u>L/F</u>
CCV								<u>P/F</u>	<u>L/F</u>

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	<u>Leaf Bowman</u>	<u>6/18/18</u>	<u>8:45</u>	<u>172189</u>	<u>04/19</u>	<u>7.0</u>	<u>7.00</u>	<u>-32.3</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>1</u>	<u>1</u>	<u>1</u>	<u>176044</u>	<u>08/19</u>	<u>4.0</u>	<u>4.00</u>	<u>146.4</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>1</u>	<u>1</u>	<u>1</u>	<u>176507</u>	<u>09/19</u>	<u>10.0</u>	<u>10.00</u>	<u>-205.9</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>1</u>	<u>1</u>	<u>1</u>	<u>176044</u>	<u>08/19</u>	<u>4.0</u>	<u>3.99</u>	<u>145.9</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>1</u>	<u>1</u>	<u>15:30</u>	<u>176507</u>	<u>09/19</u>	<u>10.0</u>	<u>9.97</u>	<u>-203.0</u>	<u>P/F</u>	<u>L/F</u>
CCV									<u>P/F</u>	<u>L/F</u>

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 10 173.6, slope from 4 to 7 178.7 (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification _____

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						<u>P/F</u>	<u>L/F</u>

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

COMMENTS: