

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: SNEX

RQ: 2019-04-08-05

Project: Continuing 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: 03/19/19

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. DUGAN	04/16/19	0858	24.0	759.7	8.42	8.42	100			P/F	L/F
ICV	"	"	0900	24.0	759.7	8.42	8.42	100		1.02535	P/F	L/F
CCV	B. Davis	4/16/19	1601	24.7	757.8	8.37	8.28	100			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.	M. DUGAN	04/16/19	0902	2809050	09/20	10,000	10,000	P/F	L/F
ICV	"	"	0904	2811860	11/20	50,000	50,000	P/F	L/F
CCV	B. Davis	4/16/19	1605	2809050	9/20	10,000	9802	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.	M. DUGAN	04/16/19	0907	187681	11/20	7.	25.0	7.00	-13.1	P/F	L/F
Calibr.	"	"	0909	187188	11/20	4.	25.4	4.01	165.9	P/F	L/F
Calibr.	"	"	0911	186877	10/20	10.	24.6	10.01	-189.9	P/F	L/F
ICV	"	"	0914	186877	10/20	10.	24.5	9.97		P/F	L/F
CCV	B. Davis	4/16/19	1610	187188	11/20	4.0	24.6	4.18		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 _____, slope from 4 to 7 _____ (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: 3312B; Date of last verification: 12/26/18

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)

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Meter ID: TALLY

RQ: 04-08-05

Project: Continuous Monitoring
(Deployment)

- 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 03/19/2019

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. DUGAN	04/11/19	0715	24.6	760	8.325	8.33	100	-	-	P/F	L/F
ICV	"	"	0720	24.7	760	8.309	8.31	100	-	-	P/F	L/F
CCV	BARRINGTON	4/16/19	1610	20.31	760	8.02	8.02	99.9	-	-	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	M. DUGAN	04/11/19	0705	2809050	09/20	10,000	10,000	P/F	L/F
ICV	"	"	0710	2711027	11/19	50,000	49,990	P/F	L/F
CCV	BARRINGTON	4/16/19	1613	2901833	12/20	1000	1009	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.	M. DUGAN	04/11/19	0725	187681	11/20	6.997	24.8	7.00	42.4	P/F	L/F
Calibr.	"	"	0730	187188	11/20	4.010	24.9	4.00	115.6	P/F	L/F
Calibr.	"	"	0733	186877	10/20	10.013	24.8	10.00	-216.4	P/F	L/F
ICV	"	"	0737	186877	10/20	10.013	24.8	10.04	25.5	P/F	L/F
CCV	BARRINGTON	4/16/19	1616		10/20	10.01	24.4	4.86		P/F	L/F
CCV	↓	↓	↓	187188	11/20	4.01	24.5	3.91	-	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, slope from 4 to 7 158 (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: 33123; Date of last verification: 12/20/2018

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: