

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

Meter ID:

Big 7

RQ:

2018-04-09-15

Project:

Cont Monitoring

D.O.
POST CAL

Handwritten "X" in box with text: "Handwritten 'X' in box indicates that there is 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.

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

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

3/22/18

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.	GARY SNOOK	4/5/18	0720	25.6	8.18	8.18	100.0	N/A	1.19	P/F	L/F
ICV	"	4/5/18	0724	25.5	8.18	8.20	100.0	N/A	-	P/F	L/F
CCV	GARY SNOOK	4/10/18	1310	24.8	8.29	8.69	109.8	NA	-	P/F	L/F
CCV										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.	GARY S.	4/5/18	0733	170728C	2/18	10,000	10,000	P/F	L/F
ICV	"	4/5/18	0738	180321B	4/17	1000	975	P/F	L/F
CCV	GARY S.	4/10/18	1320	2706391	5/19	60900	49540	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	GARY S.	4/5/18	1750	177435	10/19	7.0	7.0	-29.2	P/F	L/F
Calibr.	"	4/5/18	0752	177759	10/19	4.0	4.0	152.3	P/F	L/F
Calibr.	"	4/5/18	0805	177758	10/19	10.0	9.98	-293	P/F	L/F
ICV	"	4/5/18	1712	177759	10/19	4.0	3.99	153.1	P/F	L/F
CCV	GARY SNOOK	4/10/18	1320	177758	10/19	10.0	9.96	-202.3	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 10 173.5, slope from 4 to 7 181.5 (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:

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: B16-17 RQ: 2018-04-09-15 Project: CONTINUOUS 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.

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

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 3/22/18

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.	JOHN BARRINGTON	4/5/18	0716	24.34	8.37	8.36	100.0	NA	1.07	(P) F	(L) F
ICV	JOHN BARRINGTON	4/5/18	0721	24.52	8.34	8.32	99.8	NA	NA	(P) F	(L) F
CCV	JOHN BARRINGTON	4/10/18	1310	23.85	8.43	8.54	101.1	NA	—	(P) F	(L) F
CCV										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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	JOHN BARRINGTON	4/5/18	0724	170728	8/18	10,000	10,001	(P) F	(L) F
ICV	JOHN BARRINGTON	4/5/18	0727	180321B	4/19	1000	998	(P) F	(L) F
CCV	JOHN BARRINGTON	4/10/18	1313	2706951	5/19	50000	49460	(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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	JOHN BARRINGTON	4/5/18	0730	177435	10/19	7.0	7.02	41.5	(P) F	(L) F
Calibr.	JOHN BARRINGTON	4/5/18	0733	17759	10/19	4.0	4.00	132.6	(P) F	(L) F
Calibr.	JOHN BARRINGTON	4/5/18	0736	177758	10/19	10.0	10.00	-211.0	(P) F	(L) F
ICV	JOHN BARRINGTON	4/5/18	0738	177758	10/19	4.0	3.90	—	(P) F	(L) F
CCV	JOHN BARRINGTON	4/10/18	1316	177758	10/19	10.00	10.10	—	(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 10 169.5, slope from 4 to 7 174.1 (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:

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:

1005

RQ:

2018-04-09-15

Project:

Cont 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.

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

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

3/22/18

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.	Cathy Snorek	4/10/18	720	24.1	8.4	8.4	100	39.0	1.05	P/F	L/F
ICV	"	4/10/18	722	23.7	8.43	8.42	100	39.0		P/F	L/F
CCV	"	4/10/18	1355	24.8	8.3	8.4	101	40.0		P/F	L/F
CCV				24.						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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Cathy Snorek	4/10/18	725	170728C	8/18	10,000	10,012	P/F	L/F
ICV	"	4/10/18	727	180321B	04/19	1000	992	P/F	L/F
CCV	"	4/10/18	1357	270659C	05/19	50,000	49520	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Cathy Snorek	4/10/18	730	177435	10/19	7.0	7.0	-24.7	P/F	L/F
Calibr.	"	"	735	177759	10/19	4.0	4.0	152.2	P/F	L/F
Calibr.	"	"	740	177750	10/19	10.0	9.99	-198.2	P/F	L/F
ICV	"	"	742	177759	10/19	4.0	4.0	152.1	P/F	L/F
CCV	"	"	1400	177758	10/19	10.0	9.95	-196.2	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 _____, slope from 4 to 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						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.

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