

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 name.

Meter ID: 113529

RQ: 2018-05-28-24

Project: Smp SCI

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

5/31/18

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.										P / F	L / F
ICV										P / F	L / F
CCV	S. Blode	6/5/18	0817	23.86	8.434	8.38	99.2	N/A	1.03	(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.	S. Blode	6/5/18	0820	180624B	Feb 2019	1000	1000	(P) F	(L) F
ICV	S. Blode	6/5/18	0822	180329	apr 2019	100	99	(P) F	(L) F
CCV								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.	S. Blode	6/5/18	0824	1710655	OCT 2019	7.0	7.00	-1.4	(P) F	(L) F
Calibr.	S. Blode		0826	4712981	nov 2019	4.0	3.99	157.7	(P) F	(L) F
Calibr.			0828	2709903	mar 2019	10.0	9.99	162.3	(P) F	(L) F
ICV			0830	4712981	nov 2019	4.0	4.04	157.5	(P) F	(L) F
CCV									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 10 140.9, slope from 4 to 7 161.1 (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:

not used in the field

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 name.

Meter ID:

132237

RQ:

2018-06-04-40

Project:

SMP - Dune Lakes

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

4/19/18

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.										P/F	L/F
ICV										P/F	L/F
CCV	J. P. Jans	6/5/18	0718	24.92	8.279	8.27	100	1.02	1.02	P/F	L/F
CCV	J. P. Jans	6/5/18	1630	23.78	8.450	8.50	101	-	-	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; 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.	J. P. Jans	6/5/18	0720	180124B	2/2019	1000	1000	P/F	L/F
ICV			0722	180329	4/2019	100	99	P/F	L/F
CCV	J. P. Jans	6/5/18	1632	180124D	2/2019	50,000	48375	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.	J. P. Jans	6/5/18	0724	1740055	10/2019	7.0	7.0	-37.5	P/F	L/F
Calibr.			0726	4712981	11/2019	4.0	4.6	140.5	P/F	L/F
Calibr.			0728	2709903	3/2019	10.0	10.0	-205.8	P/F	L/F
ICV			0730	2709903	3/2019	10.0	9.97	-	P/F	L/F
CCV	J. P. Jans	6/5/18	1634	4712981	11/2019	4.0	4.0	-	P/F	L/F
CCV									P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 168.3, slope from 4 to 7 178.0 (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 4/19/18

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	J. P. Jans	6/4/18	0732	0.00	0.00	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: