

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: **PRO DSS**

RQ: **2018-10-29-23**

Project: **SCI Ref**

- 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 **10/2018**

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.	C. Ruben	11-1-18	0730	22.6	760	8.64	8.66	100	-	-	P/F	L/F
ICV	↓	11-1-18	0733	22.6	760	8.64	8.66	99.8	-	-	P/F	L/F
CCV	C. Ruben	11-1-18	1330	21.5	760	8.82	8.60	98.0	-	-	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.	C. Ruben	11-1-18	0738	10141318	9/2019	1413	1413	P/F	L/F
ICV	↓	↓	0741	180321A	4/2019	100	100.2	P/F	L/F
CCV	↓	↓	1333	10141318	9/2019	1413	1417	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.	C. Ruben	11-1-18	0745	2803E45	3/2020	7.	24.1	7.0	-29.8	P/F	L/F
Calibr.	↓	↓	0749	2806975	6/2020	4.	24.2	4.0	153.4	P/F	L/F
Calibr.	↓	↓	0753	2712B55	6/2019	10.	24.0	10.0	-198	P/F	L/F
ICV	↓	↓	0757	2803E45	3/2020	7.0	24.1	7.07	-28.6	P/F	L/F
CCV	C. Ruben	11-1-18	1337	2712B55	6/2019	10.0	24.1	10.01	-201	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: _____; Date of last 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	C. Ruben	11/1/18	0800	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:

QC/Scanned BT 11/15/18 JP 11/5/18

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: YSI#3 RQ: 2018-11-05-16 Project: LSSR Southside 1+2

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

10-10-18

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.	PO'Connor	11-01-18	0630	23.3	8.53	8.52	99.9	—	—	(P) F	(L) F
ICV	V	V	0633	23.4	8.51	8.51	99.9	—	—	(P) F	(L) F
CCV	PO'Connor	11-01-18	1315	22.5	8.66	8.54	98.7	—	—	(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.	PO'Connor	11-01-18	0635	10141318	09-2019	1413	1413	(P) F	(L) F
ICV	V	V	0638	1803210	12-2018	158141	150	(P) F	(L) F
CCV	PO'Connor	11-01-18	1318	10141318	09-2019	1413	1415	(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.	PO'Connor	11-01-18	0645	2803E45	03-2020	7.0	7.00	-19.3	(P) F	(L) F
Calibr.			0652	2800A75	06-2020	4.0	4.00	158.6	(P) F	(L) F
Calibr.			0655	2712B55	06-2019	10.0	9.97	-188.5	(P) F	(L) F
ICV	V	V	0700	2803E45	03-2020	7.00	7.05	-19.3	(P) F	(L) F
CCV	B-L-D	11/1/18	1325	105413	4/19	10.4	10.3	-207.2	(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 10-10-18

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: ICV with Lot # 1470718 1470m oh PwO
ICV with
BDQC/SG used 11/5/18 JPN/5/18