

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: YSI 11

RQ- 2018-11-26-14

Project: LSI North Salt

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

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	11-28-18	0735	19.6	9.16	9.16	99.6	—	—	—	P/F	L/F
ICV	↓	11-28-18	0738	19.8	760	9.13	9.15	100	—	—	P/F	L/F
CCV	C. Ruben	11-28-18	1315	17.1	760	9.64	9.64	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	C. Ruben	11-28-18	0742	181102	11/2019	1000	1000	P/F	L/F
ICV	↓	11-28-18	0745	180321A	4/2019	100	100.7	P/F	L/F
CCV	C. Ruben	11-28-18	1320	1624520	9/2019	24820	25147	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	11-28-18	0750	2803E45	3/2020	7.	21.7	7.0	-31.7	P/F	L/F
Calibr.	↓		0753	2806975	6/2020	4.	21.6	4.0	149.2	P/F	L/F
Calibr.	↓		0757	2712855	6/2019	10.	21.5	10.0	-200.8	P/F	L/F
ICV	↓		0800	2803E45	8/2020	7.0	21.5	7.04	-30.3	P/F	L/F
CCV	C. Ruben	11-28-18	1325	2712855	6/2019	10.0	22.0	9.9	-202.9	P/F	L/F
CCV	↓		1330	2806975	6/2020	4.0	22.0	3.97	149.7	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	11-28-18	0805	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 BD 12/13/18 JP 11/30/18

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

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Meter ID: YSI #3

RQ- 2018-11-26-15

Project: LSSR DOWNTOWN

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

10-10-18

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.	P O'Connor	11-28-18	0732	20.9	760	8.93	8.92	100.0	—	—	(P) F	(L) F
ICV	V	V	0740	21.00	760	8.91	8.91	100.0	—	—	(P) F	(L) F
CCV	P O'Connor	11-28-18	1356	17.1	760	9.64	9.61	99.8	—	—	(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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	P O'Connor	11-28-18	0742	181102	11-2019	1000	1000	(P) F	(L) F
ICV	V	V	0745	180321A	04-2019	100	102	(P) F	(L) F
CCV	P. O'Connor	11-28-18	1352	181102	11-2019	1000	1000	(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.	P O'Connor	11-28-18	0747	2803E45	03-2020	7.00	21.72	7.00	-22.0	(P) F	(L) F
Calibr.	V	V	0752	2806975	06-2020	4.00	21.67	4.00	152.4	(P) F	(L) F
Calibr.	V	V	0755	1806F51	12-2019	10.00	21.43	9.98	-190.4	(P) F	(L) F
ICV	V	V	0758	2803E45	03-2020	7.00	21.80	7.04	-22.0	(P) F	(L) F
CCV	P O'Connor	11-28-18	1355	2806975	06-2020	4.00	21.97	3.98	151.9	(P) F	(L) F
CCV	V	V	1358	1806F51	12-2019	10.00	22.1	10.01	192.4	(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 _____, 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: 10-10-18

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						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:

CCV Temp for 4.00 Buffer 21.97 μ ho
QC/Scanned BT 12/3/18 JP 11/30/18