

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: **YSI 11**

RQ: **2018-10-15-10**

Project: **LSJR Marine**

- 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

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.	C Ruben	10/18/18	0727	23.7	8.46	8.46	100	—	—	(P) F	(L) F
ICV	↓	↓	0729	23.7	8.46	8.46	100	—	—	(P) F	(L) F
CCV	C Ruben		1230	23.7	8.46	8.46	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; 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	10/18/18	0732	180711A	7/2019	1000	1000	(P) F	(L) F
ICV	↓	↓	0735	180321A	4/2019	100	107	(P) F	(L) F
CCV	↓	10/18	1233	170720C	8/2018	50,000	49,005	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.	C. Ruben	10/18/18	0738	2803E45	3/2020	7.0	7.0	-21.1	(P) F	(L) F
Calibr.	↓	↓	0742	2808975	6/2020	4.0	4.0	154	(P) F	(L) F
Calibr.	↓	↓	0745	2712855	6/2019	10.0	10.0	-192.5	(P) F	(L) F
ICV	↓	↓	0748	2803E45	3/2020	7.0	7.04	-21.3	(P) F	(L) F
CCV	C Ruben	10/18/18	1240	2712855	6/2019	10.0	9.96	-190.7	(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	C Ruben	10/18/18	0752	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/checked BT 10/23/18 JP 10/19/18

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: FLC 155

RQ: 2018-10-08-12

Project: Nassau West

- 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 _____

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.	<u>B-V-</u>	<u>10/18/18</u>	<u>741</u>	<u>23.2</u>	<u>8.54</u>	<u>8.54</u>	<u>100</u>	<u>/</u>	<u>/</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>743</u>	<u>23.2</u>	<u>8.54</u>	<u>8.55</u>	<u>100.1</u>	<u>/</u>	<u>/</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>Kalmbacher</u>	<u>10-18-18</u>	<u>1220</u>	<u>22.7</u>	<u>8.62</u>	<u>8.70</u>	<u>100.9</u>	<u>-</u>	<u>-</u>	<u>(P) F</u>	<u>(L) F</u>
CCV										<u>P / F</u>	<u>L / F</u>

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.	<u>B-V-</u>	<u>10/18/18</u>	<u>747</u>	<u>180711A</u>	<u>7/19</u>	<u>1000</u>	<u>1000</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>750</u>	<u>180321A</u>	<u>4/19</u>	<u>100</u>	<u>102.7</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>Kalmbacher</u>	<u>10-18-18</u>	<u>1222</u>	<u>180711A</u>	<u>7/2019</u>	<u>1.000</u>	<u>1.004</u>	<u>(P) F</u>	<u>(L) F</u>
CCV								<u>P / F</u>	<u>L / F</u>

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.	<u>B-V-103</u>	<u>10/18/18</u>	<u>800</u>	<u>2803E45</u>	<u>3/20</u>	<u>7.0</u>	<u>7.0</u>	<u>-249</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.			<u>803</u>	<u>2806975</u>	<u>6/20</u>	<u>4.0</u>	<u>4.0</u>	<u>158.0</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.			<u>806</u>	<u>2712B55</u>	<u>6/19</u>	<u>10.0</u>	<u>10.0</u>	<u>-175.4</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>809</u>	<u>2803E45</u>	<u>3/20</u>	<u>7.0</u>	<u>7.08</u>	<u>-25.3</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>Kalmbacher</u>	<u>10-18-18</u>	<u>1225</u>	<u>2806973</u>	<u>6/2020</u>	<u>4.0</u>	<u>4.03</u>	<u>152.1</u>	<u>P / F</u>	<u>L / F</u>
CCV									<u>P / F</u>	<u>L / F</u>

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	<u>B-V-</u>	<u>10/18/18</u>	<u>811</u>	<u>0.00</u>	<u>0.00</u>	<u>(P) F</u>	<u>(L) F</u>

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

BP QC/scanned 10/23/18 JP 10/19/18