

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 #3 RQ- 2018-09-24-07 Project: LSJR Southwest 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 07-11-18

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	09-26-18	0705	23.6	8.48	8.48	100.0	—	—	(P/F)	(L/F)
ICV	✓	✓	0708	23.7	8.46	8.46	99.9			(P/F)	(L/F)
CCV	AKelmbacher	9-26-18	1320	25.2	8.23	8.25	100.2	—	—	(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.	PO'Connor	09-26-18	0710	180711A	07-2019	1000	1000	(P/F)	(L/F)
ICV	✓	✓	0713	1807321A	04-2019	100	102	(P/F)	(L/F)
CCV	AKelmbacher	9-26-18	1325	180711A	07-2019	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	PO'Connor	09-26-18	0715	2803E45	03-2020	7.0	7.00	-18.7	(P/F)	(L/F)
Calibr.			0720	2803B38	03-2020	4.0	4.00	143.4	(P/F)	(L/F)
Calibr.			0725	2712B55	06-2019	10.0	9.97	-172.7	(P/F)	(L/F)
ICV	✓	✓	0732	2803E45	03-2020	7.0	7.04	-18.1	(P/F)	(L/F)
CCV	AKelmbacher	9-26-18	1330	2803E45	03/2020	7.0	7.04	-18.6	(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 07-11-18

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:

BP Scanned/QC 10/8/18 JP 9/28/18

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 name.

Meter ID: **PROD55**

RQ- **2018-09-2409**

Project: **LSJR 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.	C. Ruben	9/26/18	0740	23.1	8.56	8.56	100	-	-	(P/F) (L/F)	(L/F)
ICV	↓	↓	0742	23.1	8.56	8.56	100	-	-	(P/F) (L/F)	(L/F)
CCV	C. Ruben	9/26/18	1230	22.5	8.66	8.65	100	-	-	(P/F) (L/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.	C. Ruben	9/26/18	0745	180711A	7/2019	1000	1000	(P/F) (L/F)	(L/F)
ICV	↓	↓	0750	180321A	4/2019	100	101.0	(P/F) (L/F)	(L/F)
CCV	C. Ruben	9/26/18	1235	3221413	9/2018	1413	1433	(P/F) (L/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	9/26/18	0750	2803545	3/2020	7.0	7.00	-20.8	(P/F) (L/F)	(L/F)
Calibr.	↓	↓	0755	2806945	6/2020	4.0	3.99	162.2	(P/F) (L/F)	(L/F)
Calibr.	↓	↓	0800	2712355	6/2019	10.0	9.98	-196.6	(P/F) (L/F)	(L/F)
ICV	↓	9/26/18	0803	2803545	3/2020	7.0	7.03	-19.6	(P/F) (L/F)	(L/F)
CCV	C. Ruben	9/26/18	1238	2712355	6/2019	10	10.07	-196.8	(P/F) (L/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	9/26/18	0805	0.00	0.00	(P/F) (L/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:

BP QC/Scanned 10/8/18 JP 9/28/18