

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: VSI#4 RQ- 2018-01-29-10 Project: LSJE West 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 1/2018

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.	J. Parnish	2/1/18	725	20.6	8.98	8.98	100	54.3	—	P/F	L/F
ICV	J	2	727	20.6	8.98	8.98	99.8	54.3	—	P/F	L/F
CCV	J. Parnish	2/1/18	1532	21.40	8.85	8.85	99.5	54.3	—	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 #	Explr. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	J. Parnish	2/1/18	720	171129A	12/18	1000	1000	P/F	L/F
ICV	J	2	730	8147207	3/18	147	153	P/F	L/F
CCV	J. Parnish	2/1/18	1537	170815A	3/18	100	104	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 #	Explr. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	J. Parnish	2/1/18	732	2708B60	7/19	7.0	7.00	36.7	P/F	L/F
Calibr.	J	2	733	2711517	10/19	4.0	4.00	144.1	P/F	L/F
Calibr.	J	2	734	2706D31	12/18	10.0	10.00	206.3	P/F	L/F
ICV	J	2	735	2711517	10/19	4.0	4.00	142.5	P/F	L/F
CCV	J	2	1540	2706D31	12/18	10.0	9.93	205	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	J. Parnish	2/1/18	736	0.00	0.001	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 2/7/18 JP 2/2/18

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: YSI #3 RQ: 2018-01-22-09 Project: Guille South

- 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 1/2018

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.	N. Fredlin	2/1/18	0730	20.77	8.94	8.94	100	39.0	0.97	☒ P ☐ F	☐ L ☐ F
ICV	↓	2/1/18	0732	20.83	8.95	8.94	99.9	39.0	0.97	☐ P ☒ F	☐ L ☐ F
CCV	B. Davis	2/1/18	1535	21.0	8.91	7.97	89.5	34.9	0.97	☐ 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 #	Explr. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	N. Fredlin	2/1/18	0735	171129A	12/18	1,000	1,000	☐ P ☒ F	☐ L ☐ F
ICV	↓	2/1/18	0738	170315A	3/18	100	100	☐ P ☒ F	☐ L ☐ F
CCV	B. Davis	2/1/18	1540	171129A	12/18	1000	997	☐ 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 #	Explr. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	N. Fredlin	2/1/18	0740	2708B60	7/19	7.0	7.00	-16.0	☐ P ☒ F	☐ L ☐ F
Calibr.	↓	2/1/18	0745	2710816	9/19	4.0	4.0	157.6	☐ P ☒ F	☐ L ☐ F
Calibr.	↓	2/1/18	0750	2708A21	1/19	10.0	10.0	-189.5	☐ P ☒ F	☐ L ☐ F
ICV									P / F	L / F
CCV	B. Davis	2/1/18	1545	2708B60	7/19	7.0	7.02	-17.0	☐ 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	N. Fredlin	2/1/18	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:

BD QC/Scanned 2/7/18

JP 2/5/18