

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 71 RQ: 2018-04-16-34 Project: LSJL 500msd

- 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 4/18

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.	J Parrish	4/18/18	0727	22.2	8.10	8.11	100.0	—	1.03155	P/F	L/F
ICV	PO Connor	04-18-18	0730	22.3	8.69	8.10	100.0	—	1.03035	P/F	L/F
CCV	J Parrish	4/18/18	1303	21.7	8.79	8.79	100.0	—		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; 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.	J Parrish	04-18-18	0735	180321B	4/19	1000	1000	P/F	L/F
ICV	PO Connor	04-18-18	0737	1470318	9/18	1470	—	P/F	L/F
CCV				171129B	12-2018	100	102	P/F	L/F
CCV	J Parrish	4/18/18	1306	3221413	4/18	1413	1373	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	04-18-18	0740	2711C81	11/19	7.0	7.00	-8.9	P/F	L/F
Calibr.			0742	2711S17	10/19	4.0	4.00	160.2	P/F	L/F
Calibr.			0745	2711S27	4/19	10.0	9.99	176.0	P/F	L/F
ICV			0747	2711C81	4/19	7.0	7.01	-9.0	P/F	L/F
CCV	J Parrish	4/18/18	1307	2711S17	10/19	10.0	10.03	176.1	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 04-10-18

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:

BD QC / Scanned 4/23/18 JP 4/20/18

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 #4

RQ: 2018-16-10

Project: Suzanne North

- 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 Lab

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 4/18

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.	<u>B-T</u>	<u>4/18/18</u>	<u>750</u>	<u>22.6</u>	<u>8.64</u>	<u>8.65</u>	<u>100</u>	<u>59.4</u>	<u>0.95</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>753</u>	<u>22.7</u>	<u>8.63</u>	<u>8.64</u>	<u>100</u>	<u>59.4</u>	<u>0.95</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1520</u>	<u>24.06</u>	<u>8.40</u>	<u>8.48</u>	<u>100.9</u>	<u>60.4</u>	<u>0.95</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-T</u>	<u>4/18/18</u>	<u>755</u>	<u>180321B</u>	<u>4/19</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>758</u>	<u>171129B</u>	<u>12/18</u>	<u>100</u>	<u>100</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1523</u>	<u>1470318</u>	<u>9/18</u>	<u>147</u>	<u>149</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-T</u>	<u>4/18/18</u>	<u>805</u>	<u>2711C81</u>	<u>11/19</u>	<u>7.0</u>	<u>7.0</u>	<u>-37.4</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>809</u>	<u>2711517</u>	<u>10/19</u>	<u>4.0</u>	<u>4.0</u>	<u>141.6</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>813</u>	<u>2711527</u>	<u>4/19</u>	<u>10.0</u>	<u>9.98</u>	<u>-209.8</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>820</u>	<u>2711C81</u>	<u>11/19</u>	<u>7.0</u>	<u>7.03</u>	<u>-36.7</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1525</u>	<u>2711517</u>	<u>10/19</u>	<u>4.0</u>	<u>4.07</u>	<u>136.7</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 ;

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Pressure mode in air						<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:

QC/Scanned BT 4/23/18 JP 4/20/18