

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: QUANTA #1 RQ: 2018-03-05-23 Project: SJW North-Santa Fe

- 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 01-10-18

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>P O'Connor</u>	<u>03-12-18</u>	<u>0720</u>	<u>22.6</u>	<u>8.64</u>	<u>8.61</u>	<u>100.1</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>✓</u>	<u>✓</u>	<u>0723</u>	<u>22.7</u>	<u>8.62</u>	<u>8.61</u>	<u>100.1</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>P O'Connor</u>	<u>03-12-18</u>	<u>1703</u>	<u>22.1</u>	<u>8.72</u>	<u>8.50</u>	<u>97.4</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.

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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	<u>P O'Connor</u>	<u>03-12-18</u>	<u>0725</u>	<u>171129A</u>	<u>12-2018</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>✓</u>	<u>✓</u>	<u>0728</u>	<u>170315A</u>	<u>03-2018</u>	<u>100</u>	<u>98</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>P O'Connor</u>	<u>03-12-18</u>	<u>1706</u>	<u>171129A</u>	<u>12-2018</u>	<u>1000</u>	<u>991</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>P O'Connor</u>	<u>03-12-18</u>	<u>0730</u>	<u>2709B15</u>	<u>09-2019</u>	<u>7.0</u>	<u>7.00</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>✓</u>	<u>✓</u>	<u>0733</u>	<u>2711517</u>	<u>10-2019</u>	<u>4.0</u>	<u>4.00</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
Calibr. ICV	<u>✓</u>	<u>✓</u>	<u>0734</u>	<u>2708A21</u>	<u>01-2019</u>	<u>10.0</u>	<u>9.94</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
ICV CCV	<u>P O'Connor</u>	<u>03-12-18</u>	<u>1710</u>	<u>2709B15</u>	<u>09-2019</u>	<u>7.0</u>	<u>7.05</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV									<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 N/A, slope from 4 to 7 N/A (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes X 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>N/A</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:

QC/Scanned BD 3/23/18 JP 3/16/18

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: YSL 8

RQ: 2018-03-05-2

Project: SANITARY SCT

- 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 Parrish	3/12/18	741	22.4	8.67	8.67	100	—	—	P/F	L/F
ICV	J	J	742	22.5	8.66	8.66	100	—	—	P/F	L/F
CCV	J Parrish	3/12/18	1714	22.4	8.67	8.61	99.1	—	—	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	J Parrish	3/12/18	745	171129A	12/18	1000	1000	P/F	L/F
ICV	J	J	747	81472011	3/18	147	151	P/F	L/F
CCV	J Parrish	3/12/18	1715	170315A	3/18	100	103	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.	J Parrish	3/12/18	748	27091315	9/19	7.0	7.0	—	P/F	L/F
Calibr.	J	J	749	2711517	10/19	4.0	4.0	57.2	P/F	L/F
Calibr.	J	J	750	2708121	11/19	10.0	9.98	161.4	P/F	L/F
ICV	J	J	751	27091315	9/19	7.0	6.98	1	P/F	L/F
CCV	J Parrish	3/12/18	1817	2711517	10/19	4.0	4.00	156.1	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 _____

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 Parrish	3/12/18	752	0.0	0.0	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 3/23/18 JP 3/16/18