

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: 113529

RQ: 2018-11-26-72

Project: SMP Pine Lakes

- 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

8/27/18

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.										P / F	L / F
ICV										P / F	L / F
CCV	J. P. H. S.	11/29/18	0715	19.2	9.239	9.12	98.8	—	—	<u>P</u> / F	<u>L</u> / F
CCV	J. P. H. S.	11/29/18	1405	20.2	9.056	9.08	100.3	—	—	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. P. H. S.	11/29/18	0717	180125C	2/2019	1000	1000	<u>P</u> / F	<u>L</u> / F
ICV	J. P. H. S.	↓	0719	180517A	5/2019	100	104	<u>P</u> / F	<u>L</u> / F
CCV	J. P. H. S.	11/29/18	1407	180124D	2/2019	50,000	49352	<u>P</u> / F	<u>L</u> / 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. P. H. S.	11/29/18	0721	1805E45	4/2020	7.0	7.0	-21.2	<u>P</u> / F	<u>L</u> / F
Calibr.	↓	↓	0723	2803729	2/2020	4.0	4.0	157.8	<u>P</u> / F	<u>L</u> / F
Calibr.	↓	↓	0725	2804020	10/2019	10.0	10.0	-188.0	<u>P</u> / F	<u>L</u> / F
ICV	↓	↓	0727	2804020	10/2019	10.0	9.98	—	<u>P</u> / F	<u>L</u> / F
CCV	J. P. H. S.	11/29/18	1409	2803729	2/2020	4.0	4.0	—	<u>P</u> / F	<u>L</u> / 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 10 166.8, slope from 4 to 7 188.0 (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						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:

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: 154179

RQ: 208-11-26-16

Project: SMP

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

10/17/18

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.										P / F	L / F
ICV										P / F	L / F
CCV	<u>NM</u>	<u>11/29/18</u>	<u>0630</u>	<u>20.8</u>	<u>8.950</u>	<u>9.09</u>	<u>101.6</u>			<u>P</u> / <u>F</u>	<u>L</u> / <u>F</u>
CCV	<u>✓</u>	<u>✓</u>	<u>1330</u>	<u>21.5</u>	<u>8.829</u>	<u>8.99</u>	<u>101.9</u>			<u>P</u> / <u>F</u>	<u>L</u> / <u>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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	<u>NM</u>	<u>11/29/18</u>	<u>0635</u>	<u>R0125C</u>	<u>2/19</u>	<u>1000</u>	<u>1000</u>	P / F	<u>L</u> / <u>F</u>
ICV	<u>✓</u>	<u>✓</u>	<u>0640</u>	<u>R0517A</u>	<u>5/19</u>	<u>100</u>	<u>102</u>	<u>P</u> / <u>F</u>	<u>L</u> / <u>F</u>
CCV	<u>✓</u>	<u>✓</u>	<u>1335</u>	<u>18013C</u>	<u>2/19</u>	<u>1000</u>	<u>1230</u>	<u>P</u> / <u>F</u>	<u>L</u> / <u>F</u>
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.	<u>NM</u>	<u>11/29/18</u>	<u>0645</u>	<u>R0517A</u>	<u>4/20</u>	<u>7.0</u>	<u>7.0</u>		P / F	<u>L</u> / <u>F</u>
Calibr.	<u>✓</u>	<u>✓</u>	<u>0648</u>	<u>280329</u>	<u>2/20</u>	<u>4.0</u>	<u>4.0</u>		P / F	<u>L</u> / <u>F</u>
Calibr.	<u>✓</u>	<u>✓</u>	<u>0650</u>	<u>2804C20</u>	<u>1/19</u>	<u>10.0</u>	<u>10.0</u>		P / F	<u>L</u> / <u>F</u>
ICV	<u>✓</u>	<u>✓</u>	<u>0655</u>	<u>280329</u>	<u>2/20</u>	<u>4.0</u>	<u>4.02</u>	<u>131.5</u>	<u>P</u> / <u>F</u>	<u>L</u> / <u>F</u>
CCV	<u>✓</u>	<u>✓</u>	<u>1345</u>	<u>1805F95</u>	<u>4/20</u>	<u>7.0</u>	<u>7.11</u>	<u>-38.90</u>	<u>P</u> / <u>F</u>	<u>L</u> / <u>F</u>
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 10/17/18

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: