

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: 2016-03-26-19 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 11/29/18

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. J. J.	3/28/18	0720	22.4	8.677	8.67	100	—	1.03	Ⓟ / F	Ⓟ / F
CCV	J. P. J. J.	3/28/18	1415	23.2	8.546	8.57	100	—	—	Ⓟ / F	Ⓟ / 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.	J. P. J. J.	3/28/18	0722	180124B	2/2019	1000	1000	Ⓟ / F	Ⓟ / F
ICV	↓	↓	0723	180124C	2/2019	10,000	9756	Ⓟ / F	Ⓟ / F
CCV	J. P. J. J.	3/28/18	1417	180124A	2/2019	100	97	Ⓟ / F	Ⓟ / 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. J. J.	3/28/18	0725	1710855	10/2019	7.0	7.0	-6.0	Ⓟ / F	Ⓟ / F
Calibr.	↓	↓	0727	4712981	4/2019	4.0	4.0	169.8	Ⓟ / F	Ⓟ / F
Calibr.	↓	↓	0729	2709903	5/2019	10.0	10.0	-178.1	Ⓟ / F	Ⓟ / F
ICV	↓	↓	0730	2709903	5/2019	10.0	10.0	—	Ⓟ / F	Ⓟ / F
CCV	J. P. J. J.	3/28/18	1419	4712981	4/2019	4.0	4.0	—	Ⓟ / F	Ⓟ / 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 10 172.1, slope from 4 to 7 175.8 (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: 132237 RQ: 2018-03-12-42 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 1/22/18

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>J. Slode</u>	<u>3/28/18</u>	<u>0805</u>	<u>22.45</u>	<u>8.660</u>	<u>8.65</u>	<u>99.8</u>	<u>N/A</u>	<u>1.01312</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>W. Butane</u>	<u>3/28/18</u>	<u>1709</u>	<u>20.32</u>	<u>9.039</u>	<u>9.03</u>	<u>99.9</u>	<u>N/A</u>	<u>1.01312</u>	<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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	<u>J. Slode</u>	<u>3/28/18</u>	<u>0808</u>	<u>180124B</u>	<u>Feb 2019</u>	<u>1000</u>	<u>1000</u>	<u>(P) F</u>	<u>(L) F</u>
ICV	<u>J. Slode</u>	<u>3/28/18</u>	<u>0810</u>	<u>180124A</u>	<u>Feb 2019</u>	<u>100</u>	<u>100</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>W. Butane</u>	<u>3/28/18</u>	<u>1711</u>	<u>180124A</u>	<u>Feb 2019</u>	<u>100</u>	<u>97</u>	<u>(P) F</u>	<u>(L) 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>J. Slode</u>	<u>3/28/18</u>	<u>0812</u>	<u>1710G55</u>	<u>OCT 2019</u>	<u>7.0</u>	<u>7.00</u>	<u>-33.5</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.	<u>J. Slode</u>	<u>3/28/18</u>	<u>0814</u>	<u>4712981</u>	<u>Nov 2019</u>	<u>4.0</u>	<u>4.00</u>	<u>143.8</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.	<u>J. Slode</u>	<u>3/28/18</u>	<u>0815</u>	<u>2709903</u>	<u>Mar 2019</u>	<u>10.0</u>	<u>9.97</u>	<u>-202.3</u>	<u>(P) F</u>	<u>(L) F</u>
ICV	<u>J. Slode</u>	<u>3/28/18</u>	<u>0817</u>	<u>4712981</u>	<u>Nov 2019</u>	<u>4.0</u>	<u>3.97</u>	<u>144.0</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>W. Butane</u>	<u>3/28/18</u>	<u>1712</u>	<u>1710G55</u>	<u>OCT 2019</u>	<u>7.0</u>	<u>7.04</u>	<u>-33.1</u>	<u>(P) F</u>	<u>(L) 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 10 168.8, slope from 4 to 7 177.3 (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 1/22/18

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	<u>J. Slode</u>	<u>3/28/18</u>	<u>0819</u>	<u>0.23</u>	<u>0.23</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: