

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- 2018-02-12-40

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

1/22/2018

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.										P / F	L / F
ICV										P / F	L / F
CCV	MILLE KING	3/13	0720	21.18	8.829	8.88	100.0			(P) F	(L) F
CCV	J. P. J.	3/13	1520	18.5	9.371	9.33	100	—	—	(P) F	(L) 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.	m	3/13	0725	180124C	02/2019	10000	10000	P / F	L / F
ICV	m	3/13	0726	180124B	02/2019	1000	1004	(P) F	(L) F
CCV	m	3/13	1522	180124A	2/2019	100	98	(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.	m	3/13	0730	2610663	10/2018	7.0	7.00	-28.7	P / F	L / F
Calibr.	m	3/13	0731	4712981	11/2019	4.0	4.00	146.7	P / F	L / F
Calibr.	m	3/13	0732	2611A79	05/2018	10.0	10.00	-195.3	P / F	L / F
ICV	m	3/13	0733	4712981	11/2019	4.0	4.02		(P) F	(L) F
CCV	J. P. J.	3/13	1524	2611A79	5/2018	10.0	10.0	—	(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 10 166.6, slope from 4 to 7 175.4 (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						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: 113529 RQ: 208-03-12-43 Project: SNP

- 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 1/29/18

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	<u>NM</u>	<u>3/13</u>	<u>0730</u>	<u>21.12</u>	<u>8.898</u>	<u>880</u>	<u>99.0</u>			<u>P</u> / F	<u>L</u> / F
CCV	<u>NM</u>	<u>3/14</u>	<u>0800</u>	<u>21.20</u>	<u>8.88</u>	<u>888</u>	<u>100.0</u>			<u>P</u> / F	<u>L</u> / 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.	<u>NM</u>	<u>3/13</u>	<u>0735</u>	<u>80124B</u>	<u>2/19</u>	<u>1000</u>	<u>1000</u>	P / F	L / F
ICV	<u>↓</u>	<u>↓</u>	<u>0739</u>	<u>80124A</u>	<u>2/19</u>	<u>100</u>	<u>99</u>	<u>P</u> / F	<u>L</u> / F
CCV	<u>NM</u>	<u>3/14</u>	<u>0732</u>	<u>180124D</u>	<u>2/19</u>	<u>50,000</u>	<u>47,840</u>	<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.	<u>NM</u>	<u>3/13</u>	<u>0740</u>	<u>2610663</u>	<u>10/18</u>	<u>7.0</u>	<u>7.0</u>		P / F	<u>L</u> / F
Calibr.	<u>↓</u>	<u>↓</u>	<u>0743</u>	<u>471281</u>	<u>11/19</u>	<u>4.0</u>	<u>4.0</u>		P / F	<u>L</u> / F
Calibr.	<u>↓</u>	<u>↓</u>	<u>0744</u>	<u>2611479</u>	<u>5/18</u>	<u>10.0</u>	<u>10.0</u>		P / F	<u>L</u> / F
ICV	<u>↓</u>	<u>↓</u>	<u>0750</u>	<u>471281</u>	<u>11/19</u>	<u>4.0</u>	<u>4.02</u>	<u>130.70</u>	P / F	<u>L</u> / F
CCV	<u>NM</u>	<u>3/14</u>	<u>0740</u>	<u>2611479</u>	<u>5/18</u>	<u>10.0</u>	<u>10.05</u>	<u>24.50</u>	<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 _____, 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						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: