

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:

118163

RQ-

2018-08-13-24

Project:

LVI

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

8/30/19

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	mm	8/6/18	0715	27.9	7.842	7.71	98.3			P / F	L / F
CCV	m	8/6/18	1530	28.0	7.828	7.45	101.4			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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	mm	8/6	0720	180124C	02/2019	10000	10000	P / F	L / F
ICV	m	8/6	0721	180517B	05/2019	1000	991	P / F	L / F
CCV	m	8/6	1535	180529	04/2019	100	104	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.	mm	8/6	0725	1710655	10/2019	7.0	7.0	-10.4	P / F	L / F
Calibr.			0726	180125A	02/2019	4.0	4.0	168.4	P / F	L / F
Calibr.			0727	2709903	03/2019	10.0	10.0	-182.5	P / F	L / F
ICV			0730	180125A	02/2019	4.0	4.01		P / F	L / F
CCV	m	8/6	1539	2709902	03/2019	10.0	10.07		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						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: 208-08-06-33

Project: SAP

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 5/30/18

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. HES	8/6/18	0730	27.1	7.95	7.95	100	—	1.03	<u>(P) F</u>	<u>(L) F</u>
CCV	J. P. HES	8/6/18	1515	23.0	8.578	8.55	100	—	—	<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.	J. P. HES	8/6/18	0732	180517B	5/2019	1000	999	<u>(P) F</u>	<u>(L) F</u>
ICV	J. P. HES	8/6/18	0734	180517B	4/2019	100	101	<u>(P) F</u>	<u>(L) F</u>
CCV	J. P. HES	8/6/18	1517	180517B	5/2019	1000	993	<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.	J. P. HES	8/6/18	0736	1710655	10/2019	7.0	7.0	-1.6	<u>(P) F</u>	<u>(L) F</u>
Calibr.	J. P. HES	8/6/18	0738	180125A	2/2019	4.0	4.0	163.5	<u>(P) F</u>	<u>(L) F</u>
Calibr.	J. P. HES	8/6/18	0740	2709903	3/2019	10.0	10.0	160.4	<u>(P) F</u>	<u>(L) F</u>
ICV	J. P. HES	8/6/18	0742	2709903	3/2019	10.0	10.0	166.4	<u>(P) F</u>	<u>(L) F</u>
CCV	J. P. HES	8/6/18	1519	180125A	2/2019	4.0	4.1	—	<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 10 164.8, slope from 4 to 7 185.1 (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: