

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: L1 GUS

RQ: 2017-10-16-32

Project:

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 10/12/17

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. P. Nuss	10/18	0730	23.9	8.4	8.4	100	67.6	0.82	☒ F	☒ F
ICV	↓	↓	0731	23.9	8.4	8.4	100	67.6	—	☒ F	☒ F
CCV	Drew L. Ladd	//	1630	24.4	8.4	8.6	100	68.6	—	☒ F	☒ 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. P. Nuss	10/18	0732	270306	3/19	1000	1000	☒ F	☒ F
ICV	↓	↓	0733	270321	3/19	100	104	☒ F	☒ F
CCV	Drew L. Ladd	//	1632	270306	3/19	7000	995	☒ 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. Nuss	10/18	0734	172179	4/19	7.0	7.0	-28.3	☒ F	☒ F
Calibr.	↓	↓	0736	173531	5/19	4.0	4.0	150.4	☒ F	☒ F
Calibr.	↓	↓	0737	163619	6/18	10.0	10.0	-203.3	☒ F	☒ F
ICV	↓	↓	0738	163619	6/18	10.0	10.0	-203.3	☒ F	☒ F
CCV	Drew L. Ladd	//	1634	173531	5/19	4.0	4.0	147.1	☒ 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 10 178.7, slope from 4 to 7 175.0 (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 10/12/17

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. P. Nuss	10/18	0739	0.00	0.00	☒ F	☒ 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: AE 3 RQ- 2017-10-16-33 Project:

- 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 9/28/17

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.	A. Hurley	10/18/17	0900	23.05	8.58	8.59	100	56.3	1.15	P/F	L/F
ICV				23.05	8.58	8.58	100			P/F	L/F
CCV	must sd	10/18/17		25.8	8.2	8.0	97	55.3		P/F	L/F
CCV										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.	A. Hurley	10/18/17	0900	2703066	3/19	1000	1000	P/F	L/F
ICV				2703621	3/19	100	103	P/F	L/F
CCV				260505	10/17	5000	4950	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.	A. Hurley	10/18/17	0900	173531	5/18	7.0	7.0	27.3	P/F	L/F
Calibr.				173531	5/18	4.0	4.0	151.3	P/F	L/F
Calibr.				260505	6/16	10.0	10.0	-204.2	P/F	L/F
ICV				163619	6/16	10.0	10.0	-204.2	P/F	L/F
CCV	must sd	10/18/17	1630	173531	5/19	4.0	4.0	152.3	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 10 231.5, slope from 4 to 7 124 (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 9/28/17

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	A. Hurley	10/18/17	0900	0.00	0.00	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: