

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there are qualified data on this page.

Meter ID: Pro DSS

RQ: 2019-05-06-17

Project: LSJR Southwest

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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Brian Davis	5/7/19	735	23.3	758.5	8.5	8.5	99.8	-	-	P/F	L/F
ICV	↓	↓	736	23.5	758.6	8.5	8.49	99.9	-	-	P/F	L/F
CCV	C. Ruben	5/7/19	1455	24.1	759.2	8.4	8.54	101.5	-	-	P/F	L/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 (Pro DSS 0.75 to 1.50); 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.	Brian Davis	5/7/19	739	190430A	5/20	1000	988	P/F	L/F
ICV	↓	↓	741	147430	12/19	147	150.1	P/F	L/F
CCV	C. Ruben	5/7/19	1459	190430A	5/20	1000	988	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	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Brian Davis	5/7/19	750	2811E61	11/20	7.0	24.3	7.01	-49.1	P/F	L/F
Calibr.	↓	↓	756	2901A40	1/21	4.0	24.4	4.0	129.9	P/F	L/F
Calibr.	↓	↓	759	2809980	3/20	10.0	24.5	10.01	-228	P/F	L/F
ICV	↓	↓	805	2811E61	11/20	7.0	24.4	7.05	-50.0	P/F	L/F
CCV	C. Ruben	5/7/19	1502	2901A40	1/21	4.0	24.7	4.11	123.0	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 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	B = D =	5/7/19	805	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:

5/13/19 BD 5/13/19

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there are qualified data on this page.

Meter ID: Exo

RQ: 2019-05-06-18

Project: Nassau West

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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	C. Ruben	5-7-19	0748	23.4	761	8.5	8.52	97%	—	—	P/F	L/F
ICV	↓	↓	0750	23.5	761	8.5	8.52	100%	—	—	P/F	L/F
CCV	C. Ruben	↓	1210	24.0	762	8.4	8.46	103%	—	—	P/F	L/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 (Pro DSS 0.75 to 1.50); 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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	C. Ruben	5-7-19	0753	190430A	5/2020	1000	990	P/F	L/F
ICV	↓	↓	0758	190125A	2/2020	100	102.1	P/F	L/F
CCV	C. Ruben	↓	1213	190430A	5/2020	1000	999	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	C. Ruben	5-7-19	0801	2811E61	11/2020	7.	24.6	7.18	-38.9	P/F	L/F
Calibr.	↓	↓	0804	2901A40	1/2021	4.	24.6	3.99	143.6	P/F	L/F
Calibr.	↓	↓	0807	2809A80	3/2020	10.	24.6	10.10	-206.9	P/F	L/F
ICV	↓	↓	0810	2811E61	11/2020	7.0	24.6	7.03	-35.4	P/F	L/F
CCV	C. Ruben	5-7-19	1216	2901A40	1/2021	4.0	24.6	4.10	136.2	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 ± 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)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	C. Ruben	5-7-19	0813	0.022	0.00	P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

go 5/11/19 BP 5/13/19