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-~~0~~2019-02~~04~~-15 Project: LSJR Const

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.	P. O'Connor	03-06-19	0730	20.9	768.4	8.93	9.1	101.1	—	—	(P) F	(L) F
ICV	"	"	0735	21.0	768.4	8.91	9.03	101.3	—	—	(P) F	(L) F
CCV	~~P O'Connor~~	~~03-06-19~~	~~1255~~	~~16.0~~	~~PO~~						P / F	L / F
CCV	~~PO'Conn~~	03-06-19	1310	16.6	769.0	9.74	10.1	103.7	PO	*	(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.	PO'Connor	03-06-19	0740	1901258	02-2020	1000	1000	(P) F	(L) F
ICV	"	"	0743	1807118	07-2019	1000	101.1	(P) F	(L) F
CCV	PO Conn	03-06-19	1325	1901258	02-2020	1000	1001	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.	PO'Conn	03-06-19	0748	2811E61	11-2020	7.00	21.7	7.02	-20.9	(P) F	(L) F
Calibr.	"	"	0750	2811D47	11-2020	4.00	22.1	4.00	155.6	(P) F	(L) F
Calibr.	"	"	0805	2810F55	04-2020	10.00	~~10.04~~ 10.9	10.04	~~-174.6~~	(P) F	(L) F
ICV	"	"	0808	2811E61	11-2020	7.00	21.732	7.03	-20.3	(P) F	(L) F
CCV	PO Conn	03-06-19	1330	2810F55	04-2020	10.00	21.863	10.06	~~-196.7~~	(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						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: * ALLOWED SONDE to WARM to Room temp after field work 19.8 °C Temp 768.9 mm/Hg Do chart 9.12 mg/L meter read 9.41 mg/L 103.1 % DO

Form effective August 1, 2018

JM 3/8/19 BP 3/11/19 03-06-19 1320

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: YSI #3 RQ- 2019-03-04-16 Project: Suwannee North

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 2/2019

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.	AKalmbacher	3-6-19	0810	20.8	768.0	8.95	9.09	101.8	—	—	P / F	L / F
ICV	↓	↓	0815	20.9	768.0	8.93	9.06	101.7	—	—	(P) F	(L) F
CCV	C Ruben	3.6.19	1500	17.8	768	9.50	9.47	100.1	—	—	(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.	AKalmbacher	3-6-19	0817	190125B	02/2020	1,000	1,000	P / F	L / F
ICV			0820	180711B	7/2019	100	106	(P) F	(L) F
CCV	C. Ruben	3.6.19	1503	190125B	2/2020	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.	AKalmbacher	3.6.19	0825	2811E61	11/2020	7.	21.5	7.00	-20.8	P / F	L / F
Calibr.	↓	↓	0828	2811D47	11/2020	4.	22.1	4.00	155.8	P / F	L / F
Calibr.			0832	281F55	4/2020	10.	21.9	9.98	-192.0	P / F	L / F
ICV			0835	2811E61	11/2020	7.0	21.6	7.03	-21.0	(P) F	(L) F
CCV	C Ruben		1507	2811D47	11/2020	4.0	22.1	4.04	153.6	(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 10 171.2, slope from 4 to 7 176.6 (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: 2/2019
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	AKalmbacher	3-6-19	0840	0.00	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:
TD 3/11/19

Form effective August 1, 2018