

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: **DEP154181**

RQ: **2018-09-03-33**

Project: **Nassau East**

- 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

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 O'Connor	09-05-18	0707	24.0	8.41	8.41	100.0	-	-	(P) F	(L) F
ICV	V	V	0710	24.0	8.41	8.43	100.1	-	-	(P) F	(L) F
CCV	A Kalmbacher	9-5-18	1345	25.2	8.28	8.33	101.4			(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.	P O'Connor	09-05-18	0713	180711A	07-2019	1000	1000	(P) F	(L) F
ICV	V	V	0715	180321A	04-2019	100	101.9	(P) F	(L) F
CCV	A Kalmbacher	9-5-18	1400	180711A	07-2019	1000	999	(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.	P O'Connor	09-05-18	0718	2803E45	03-2020	7.0	7.00	-22.6	(P) F	(L) F
Calibr.			0720	2803D38	03-2020	4.0	4.01	160.3	(P) F	(L) F
Calibr.			0723	2711527	04-2019	10.0	9.96	-190.8	(P) F	(L) F
ICV	V	V	0725	2803E45	03-2020	7.0	7.05	-20.6	(P) F	(L) F
CCV	A Kalmbacher	9-5-18	1405	2803D38	03/2020	4.0	3.98	159.2	(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 $+180 \pm 50$; 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 **07-11-18**

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:

B7 QC/Scanned 9/13/18 JP 9/7/18

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: Y5I#3

RQ: 2018-09-03-37

Project: Bm-sp 1

- 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.	B-V-	9/5/18	737	23.67	760	8.46	8.46	100	/	/	(P) F	(L) F
ICV			740	23.8	860	8.44	8.46	100.1	/	/	(P) F	(L) F
CCV	C. Ruben	9/5/18	1255	24.6	760	8.31	8.40	101.0	/	/	(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.	B-V-	9/5/18	842	180711A	7/19	1000	1000	(P) F	(L) F
ICV	180321A	9/5/18	844	7445	4/19	100	100	(P) F	(L) F
CCV	C. Ruben	9/5/18	1258	3221413	9/18	1413	1416	(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.	B-V-	9/5/18	846	2803E45	3/20	7.	24.7	7.0	-16.1	(P) F	(L) F
Calibr.				3803D38	3/20	4. 24.8	4.0	4.0	140.4	(P) F	(L) F
Calibr.				2711527	4/19	10.	24.8	9.97	-164.9	(P) F	(L) F
ICV				3803E45	3/20	7.0	24.8	7.04	-15.6	(P) F	(L) F
CCV	C. Ruben	9/5/18	1305	2711527	4/19	10	24.7	9.99	-165.2	(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	B-V-	9/5/18	802	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:

BV QC/Scanned 9/13/18 JP 9/7/18