

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: DEP # 154181 RQ: 2019-01-21-23 Project: WASSAU 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 _____

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	01-23-19	0715	22.2	764.6	8.70	8.78	100.6	-	-	P/F	L/F
ICV	↓	↓	0718	22.2	764.4	8.70	8.78	100.7			P/F	L/F
CCV	J Parnish	1/23/19	1405	19.6	760.1	9.17	9.29	101.4	-	-	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 mhos/cm	Meter Reading μ mhos/cm	Pass/ Fail	Lab/ Field
Calibr.	P O'Connor	01-23-19	0720	181109	11/2019	1000	1000	P/F	L/F
ICV	↓	↓	0723	180711B	07-2019	100	103.2	P/F	L/F
CCV	J Parnish	1/23/19	1418	180919	9/19	50000	50360	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.	P O'Connor	01-23-19	0725	2809841	08-2020	7.0	22.5	7.01	-41.5	P/F	L/F
Calibr.	↓	↓	0728	2810832	09-2020	4.0	22.7	4.00	115.3	P/F	L/F
Calibr.	↓	↓	0730	1806F51	12-2019	10.0	22.6	10.03	-211.7	P/F	L/F
ICV	↓	↓	0732	2809841	08-2020	7.0	22.6	7.01	-43.4	P/F	L/F
CCV	J Parnish	1/23/19	1420	2810832	9/2020	4.0	23.0	4.07	116	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: 10-10-18

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 $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

SD Scan/QC 1/28/19 JP

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- 2019-01-21-24

Project: BMAP 2

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 Davis	1/23/19	747	22.3	760	8.69	8.70	100.1	/	/	(P) F	(L) F
ICV			748	22.4	760	8.67	8.69	100.3	/	/	(P) F	(L) F
CCV	AKalmbacher	1-23-19	1450	21.5	760	8.82	8.88	100.5			(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.	B Davis	1/23/18	752	181109	11/19	1000	1000	(P) F	(L) F
ICV			753	180711B	7/19	100	103	(P) F	(L) F
CCV	AKalmbacher	1-23-19	1455	181109	11/19	1.000	1.000	(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 Davis	1/23/18	757	2809841	8/20	7.	22.6	7.0	-24.0	(P) F	(L) F
Calibr.			800	2810832	9/20	4.	22.8	4.0	153.4	(P) F	(L) F
Calibr.			804	1806F51	12/19	10.	22.8	9.98	-194.0	(P) F	(L) F
ICV			813	2809841	8/20	7.0	22.8	7.03	-23.6	(P) F	(L) F
CCV	AKalmbacher	1-23-19	1457	1806F51	12/19	10.0	23.2	10.00	-195.5	(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 Davis	1/23/18	814	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:

gr 1/25/19

CR 1/28/19