

used as "field meter" on 11/29/21

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: L.I.L.O.

RQ-

Project: BMAP Clipboard

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 11/24/21

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.	Kim Appleby	11/29/21	948	22.1	762.7	8.7	-	100.4	-	1.06722	P/F	D/F
ICV	↓	↓	950	22.3	762.9	8.7	8.75	100.5	-	1.06722	P/F	D/F
CCV	↓	12/13/21	1734	21.20	768.8	9.0	9.01	101.5	-	1.06722	P/F	D/F
CCV			1734								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 #	Explr. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Kim Appleby	11/29/21	1004	210917C	9/2022	50,000	50,000	P/F	D/F
ICV	↓	↓	1014	210917B	9/2022	1000	1025	P/F	D/F
CCV	↓	12/12/21	1738	211122A	12/2022	15000	15005	P/F	D/F
CCV	↓	↓	1740	210917C	9/2022	50,000	50,203	P/F	D/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Explr. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.						7				P/F	L/F
Calibr.						4				P/F	L/F
Calibr.						10				P/F	L/F
ICV										P/F	L/F
CCV										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: 11/24/21

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	Kim Appleby	11/29/21	1021	0.00	0.00	P/F	D/F

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

COMMENTS:

used as "field meter" on 12/13/21

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: ELSA

RQ-

Project: BMAP

Clapboard Creek

- 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 11/24/21

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.	Katrin Villinger	12/13/21	845	17.4	769.4	9.7	—	101.2	—	1.01133	(P) F	(L) F
ICV	↓	↓	850	17.7	769.4	9.6	9.64	101.3	—	1.01133	(P) F	(L) F
CCV	↓	1/6/22	1622	22.35	759.5	8.7	8.62	99.4	—	1.01133	(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.	Katrin Villinger	12/13/21	900	210917C	9/22	50000	50000	(P) F	(L) F
ICV	↓	↓	915	211122A	12/22	15000	14918	(P) F	(L) F
CCV	↓	1/6/22	1634	211122B	12/22	1413	1407	(P) F	(L) F
CCV	↓	↓	1628	210917C	9/22	50000	49670	(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.						7.				P / F	L / F
Calibr.						4.				P / F	L / F
Calibr.						10.				P / F	L / F
ICV										P / F	L / F
CCV										P / F	L / F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 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: 11/24/2021

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	Katrin Villinger	12/13/21	915	0.000	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:

SECN Coastal Water Quality Monitoring
 Datasonde Datasheet v1.42 (11/2019)—DEPLOYMENT

Station Name
TIMUclap02

Calibration / Pre-Deployment

Instrument (Sonde) # (SN) L.T.L.O.
 Calibration Date 11/29/21 Calibrated By Kim Appleby
 Battery Voltage Pre-Calibration 2.70 Battery Voltage >5.3 Y / (N) Battery Voltage Post-Calibration 2.66
 Central Wiper Replaced Y / (N) Central Wiper Parking 180° (Y) / N
 Barometric Pressure (mmHg) 762.7 Conductivity Cell Constant 0.466506 ODO Gain 1.067227
 pH7 (mv) pH10 (mv) pH4 (mv)(check) pH Slope

Parameter	Temp (°C)	Sp. Cond. (mS/cm)	Depth (m)	ODO (% Sat.)	ODO (mg/l)	pH7	pH10
Standard	<u>22.47</u>	<u>50.00</u>	<u>0.00</u>	<u>100.0</u>	<u>8.7</u>		
Measured	<u>22.45</u>	<u>50.00</u>	<u>0.00</u>	<u>100.5</u>	<u>8.75</u>		
Calibrated		<u>50.00</u>	<u>0.00</u>	<u>100.4</u>	<u>N/A</u>		

Parameter	pH4 (check)	Turbidity Low (FNU)	Turbidity High (FNU)	Chl Low (µg/l)	Chl High (µg/l)	BGA-PC Low (µg/l)	BGA-PC High (µg/l)
Standard							
Measured							
Calibrated							

Deployment

Deployed By: Kim Appleby & Brian Davis File Name: TIMUclap02-20211129
 (Station name _YYYYMMDD)
 Sonde Start Date: 11/29/21 Sonde Start Time: 1700 Eastern Standard Time (EST)
 Actual Deployment Date: 11/29/21 Actual Time Placed in Water: 1651 (EST)

Comments:

Site Observations: Fish Kill ☐ Algal Bloom ☐ Debris ☐ Hurricane / Tropical Storm ☐ Other ☐

Observation Description:

Recorded By: Kim Appleby Computer Entry By / Date: _____

Certified By / Date: _____

SECN Coastal Water Quality Monitoring
YSI Datasonde Datasheet v1.42 (11/2019) — RETRIEVAL

Station Name

TIMUclap02

Retrieval

In situ Sonde # (SN)

LTLO

Retrieved By

Katrin Villinger + Kim Appleby

Retrieval Date

12/13/21

Retrieval Time

1210 (EST)

Field Meter # (SN)

ELSA

Field Meter Calibration Date

12/13/21

On Site Readings

	Temp (°C)	Baro. Pres. (mmHg)	ODO (% Sat.)	ODO (mg/l)	Sp. Cond. (mS/cm)	Salinity (psu)	pH	Turb. (FNU)	Depth (m)	Chla (µg/l)	BGA (µg/l)
Field Meter	18.689	771.0	84.7	7.00	32.639	20.40	—	—	2.872	—	—
In situ Sonde	18.774	—	63.9	5.32	30.626	19.07	—	—	2.898	—	—

Fouling presence: Please record type of fouling **AND** amount (e.g. A, B, E, / H). Types A= Algae, B= Barnacles, C= Crabs, E= Eggs, F= Fish, O= Other, N= none, S= Sediment / Amount H=Heavy, M= Moderate, L= Light, N= None

Sonde/Guard: C(M) External Screen: — Temp/Cond: N

ODO Probe: N pH Probe: — Turbidity: —

Post Deployment

Post Deployment Reading Date

12/13/21

Battery Voltage

2.58

Central Wiper Parking 180°

☒ N

Barometric Pressure (mmHg)

768.8

Conductivity Cell Constant

—

pH7 (mv)

—

pH10 (mv)

—

pH Slope

—

pH4 (mv)

—

Parameter	Temp (°C)	Sp. Cond. (mS/cm)	Depth (m)	ODO (% Sat.)	ODO (mg/l)	pH7	pH10
Standard	20.47	50.00	0.00	100.0	9.0	—	—
Measured (clean sensors)	20.57	50.20	0.08	101.5	9.01	—	—

Parameter	pH4 (check)	Turbidity Low (FNU)	Turbidity High (FNU)	Chl Low (µg/l)	Chl High (µg/l)	BGA-PE Low (µg/l)	BGA-PE High (µg/l)
Standard	—	—	—	—	—	—	—
Measured (clean sensors)	—	—	—	—	—	—	—

Any Probe Malfunctions?

☒ N

If Y, describe in the comments.

File Name: TIMUclap - 2021129

(Station name_YYYYMMDD)

Comments:

Recorded By Kim Appleby Computer Entry By / Date

Certified By / Date