

used as "field meter" on 10/25/21

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 L'Anse-au-Loup

- 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 8/16/21

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	10/25/21	848	20.6	759.5	8.9	—	99.9	—	1.054203	P/F	L/F
ICV	↓	↓	851	20.87	759.4	8.9	8.94	100.0	—	1.054202	P/F	L/F
CCV	↓	11/15/21	608	19.98	765.6	9.2	9.11	100.0	—	1.054202	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.	Kim Appleby	10/25/21	904	210917L	9/2022	50,000	50,164	P/F	L/F
ICV	↓	↓	906	210426D	5/2022	20,000	19,895	P/F	L/F
CCV	↓	11/15/21	610	210426A	5/2022	1000	997	P/F	L/F
CCV			612	210917L	9/2022	50,000	49,980	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 ± 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: 8/18/21

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	10/25/21	853	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:

Used as "field meter" on 11/15/21

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:

Moc

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 11/10/2021

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	11/15/21	953	20.4	766.2	9.1	N/A	100.8	-	1.068145	P/F	L/F
ICV		↓	955	20.38	766.4	9.1	9.12	101.1	-	1.068145	P/F	L/F
CCV	↓	11/29/21	947	22.0	766.1	8.8	8.81	100.8	-	1.068145	P/F	L/F
CCV		↓		22.1				100.9			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.	Kim Appleby	11/15/21	1006	210917L	9/2022	50,000	50,000	P/F	L/F
ICV		↓	1008	210426D	5/2022	20,000	19,801	P/F	L/F
CCV		11/29/21	955	211122A	12/2022	15,000	14,838	P/F	L/F
CCV	↓	↓	1001	210917L	9/2022	50,000	49,838	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.						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 ± 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: 11/10/2021

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	Kim Appleby	11/15/21	959	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:

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

Station Name

TIMUclap02

Calibration / Pre-Deployment

Instrument (Sonde) # (SN) L.I.L.O.
 Calibration Date 10/25/21 Calibrated By Kim Appleby
 Battery Voltage Pre-Calibration 2.96 Battery Voltage >5.3 (EXOS) Y (N) Battery Voltage Post-Calibration 2.96
 Central Wiper Replaced Y (N) Central Wiper Parking 180° Y (N)
 Barometric Pressure (mmHg) 759.4 Conductivity Cell Constant 0.466426 ODO Gain 1.054202
 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>22.2</u>	<u>50.00</u>	<u>0.00</u>	<u>100.0</u>	<u>8.9</u>	<u>/</u>	<u>/</u>
Measured	<u>22.580</u>	<u>49.99</u>	<u>0.00</u>	<u>100.0</u>	<u>8.94</u>	<u>/</u>	<u>/</u>
Calibrated	<u>/</u>	<u>50.00</u>	<u>0.00</u>	<u>99.9</u>	<u>N/A</u>	<u>/</u>	<u>/</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	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
Measured	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
Calibrated	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

Deployment

Deployed By: Kim Appleby + Brian Davis File Name: TIMUclap02-20211025
 (Station name_YYYYMMDD)
 Sonde Start Date: 10/25/21 Sonde Start Time: 1315 Eastern Standard Time (EST)
 Actual Deployment Date: 10/25/21 Actual Time Placed in Water: 1307 (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)

L720

Retrieved By

Kim Appleby & Jeremy Parrish

Retrieval Date

11/15/21

Retrieval Time

1626 (EST)

Field Meter # (SN)

Moe

Field Meter Calibration Date

11/15/21

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	18.69	765.8	89.0	7.53	26.753	16.41	/	/	2.686	/	/
In situ Sonde	18.759	/	79.4	6.67	28.072	17.33	/	/	3.389	/	/

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 External Screen: Temp/Cond: N

ODO Probe: N pH Probe: Turbidity:

Post Deployment

Post Deployment Reading Date

11/15/21

Battery Voltage

2.63

Central Wiper Parking 180°

☒ N

Barometric Pressure (mmHg)

765.6

Conductivity Cell Constant

0.461426

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	21.49	50.00	0.00	100.0	9.2	/	/
Measured (clean sensors)	21.452	49.98	0.07	100.0	9.11	/	/

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?

Y / ☒ N

File Name:

TIMUclap02 - 20211025

If Y, describe in the comments.

(Station name _YYYYMMDD)

Comments:

Recorded By Kim Appleby

Computer Entry By / Date

Certified By / Date