

# 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: L110

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 11/14/22

| DO<br>DEP SOP<br>FT 1500 | Name              | Date            | Time<br>CT-ET | Temp<br>°C  | Baro-<br>meter<br>mmHg | D.O.<br>Chart<br>mg/L | Meter<br>D.O.<br>mg/L | % DO         | Probe<br>Charge | Probe<br>Gain | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|--------------------------|-------------------|-----------------|---------------|-------------|------------------------|-----------------------|-----------------------|--------------|-----------------|---------------|-------------------|-------------------|
| Calibr.                  | <u>KVillinger</u> | <u>12/19/22</u> | <u>1102</u>   | <u>19.4</u> | <u>769.0</u>           | <u>9.3</u>            | <u>—</u>              | <u>101.2</u> | <u>—</u>        | <u>1.048</u>  | <u>P/F</u>        | <u>L/F</u>        |
| ICV                      | <u>↓</u>          | <u>↓</u>        | <u>1104</u>   | <u>19.5</u> | <u>769.1</u>           | <u>9.3</u>            | <u>9.29</u>           | <u>101.3</u> | <u>—</u>        | <u>1.048</u>  | <u>P/F</u>        | <u>L/F</u>        |
| CCV                      | <u>↓</u>          | <u>11/9/23</u>  | <u>1630</u>   | <u>21.4</u> | <u>762.0</u>           | <u>8.9</u>            | <u>8.88</u>           | <u>99.8</u>  | <u>—</u>        | <u>1.048</u>  | <u>P/F</u>        | <u>L/F</u>        |
| CCV                      |                   |                 |               |             |                        |                       |                       |              |                 |               | <u>P/F</u>        | <u>L/F</u>        |

DO Acceptance criteria from Table  $\pm 0.3$  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.<br>Cond.<br>FT 1200 | Name              | Date            | Time<br>CT-ET | Lot #          | Expir.<br>Date | Standard<br>$\mu$ mhos/cm | Meter<br>Reading<br>$\mu$ mhos/cm | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|-------------------|-----------------|---------------|----------------|----------------|---------------------------|-----------------------------------|-------------------|-------------------|
| Calibr.                   | <u>KVillinger</u> | <u>12/19/22</u> | <u>1110</u>   | <u>220225B</u> | <u>3/23</u>    | <u>50000</u>              | <u>50000</u>                      | <u>P/F</u>        | <u>L/F</u>        |
| ICV                       | <u>↓</u>          | <u>↓</u>        | <u>1115</u>   | <u>221028B</u> | <u>11/23</u>   | <u>1413</u>               | <u>1400</u>                       | <u>P/F</u>        | <u>L/F</u>        |
| CCV                       | <u>↓</u>          | <u>11/9/23</u>  | <u>1636</u>   | <u>220719C</u> | <u>7/23</u>    | <u>50000</u>              | <u>49508</u>                      | <u>P/F</u>        | <u>L/F</u>        |
| CCV                       |                   |                 |               |                |                |                           |                                   | <u>P/F</u>        | <u>L/F</u>        |

Conductivity Acceptance criteria  $\pm 5\%$

| pH<br>DEP SOP<br>FT 1100 | Name     | Date | Time<br>CT-ET | Lot # | Expir.<br>Date | pH<br>Buffer<br>SU | Temp<br>°C | Meter<br>reading<br>SU | mV | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|--------------------------|----------|------|---------------|-------|----------------|--------------------|------------|------------------------|----|-------------------|-------------------|
| Calibr.                  | <u>K</u> |      |               |       |                | <u>7.</u>          |            |                        |    | <u>P/F</u>        | <u>L/F</u>        |
| Calibr.                  |          |      |               |       |                | <u>4.</u>          |            |                        |    | <u>P/F</u>        | <u>L/F</u>        |
| Calibr.                  |          |      |               |       |                | <u>10.</u>         |            |                        |    | <u>P/F</u>        | <u>L/F</u>        |
| ICV                      |          |      |               |       |                |                    |            |                        |    | <u>P/F</u>        | <u>L/F</u>        |
| CCV                      |          |      |               |       |                |                    |            |                        |    | <u>P/F</u>        | <u>L/F</u>        |
| CCV                      |          |      |               |       |                |                    |            |                        |    | <u>P/F</u>        | <u>L/F</u>        |

pH Acceptance criteria  $\pm 0.2$  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: 11/14/22

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: \_\_\_\_\_; Date of last verification: \_\_\_\_\_

| Depth Sensor<br>(Daily Calibration &<br>ICV) | Name              | Date            | Time<br>CT-ET | Calibrated<br>Value (0.00 or<br>Offset), meters | ICV Value,<br>meters | Pass /<br>Fail | Lab /<br>Field |
|----------------------------------------------|-------------------|-----------------|---------------|-------------------------------------------------|----------------------|----------------|----------------|
| Pressure mode in air                         | <u>KVillinger</u> | <u>12/19/22</u> | <u>1117</u>   | <u>0.000</u>                                    | <u>0.000</u>         | <u>P/F</u>     | <u>L/F</u>     |

Report two decimal places. Round numbers  $\leq 4$  down,  $\geq 5$  up. ICV acceptance criteria  $\pm 5\%$  or  $\pm 0.05$ 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) L110  
 Calibration Date 12/19/22 Calibrated By K Villinger  
 Battery Voltage Pre-Calibration 2.69 Battery Voltage >5.3 ☒ Y / ☐ N Battery Voltage Post-Calibration 2.67  
 Central Wiper Replaced ☒ Y / ☐ N Central Wiper Parking 180° ☒ Y / ☐ N  
 Barometric Pressure (mmHg) 769 Conductivity Cell Constant 0.462794 ODO Gain 1.048  
 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>20.005</u> | <u>50.000</u>     | <u>0.000</u> | <u>100.0</u> | <u>9.3</u>  |     |      |
| Measured   | <u>19.99</u>  | <u>50.000</u>     | <u>0.000</u> | <u>101.3</u> | <u>9.29</u> |     |      |
| Calibrated |               | <u>50.000</u>     | <u>0.000</u> | <u>101.2</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   |             |                     |                      |                |                 |                   |                    |
| Measured   |             |                     |                      |                |                 |                   |                    |
| Calibrated |             |                     |                      |                |                 |                   |                    |

Deployment

Deployed By: K Villinger, B Davis File Name: CC 12192022  
 (Station name \_YYYYMMDD)  
 Sonde Start Date: 12/19/22 Sonde Start Time: 1315 Eastern Standard Time (EST)  
 Actual Deployment Date: 12/19/22 Actual Time Placed in Water: 13151312kw (EST)

Comments:

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

Observation Description:

Recorded By: \_\_\_\_\_ 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)

L10

Retrieved By

BZKV

Retrieval Date

1/9/23

Retrieval Time

1110

(EST)

Field Meter # (SN)

M02

Field Meter Calibration Date

1/9/23

**On Site Readings**

|               | Temp<br>(°C)  | Baro.<br>Pres.<br>(mmHg) | ODO<br>(% Sat.) | ODO<br>(mg/l) | Sp. Cond.<br>(mS/cm) | Salinity<br>(psu) | pH          | Turb.<br>(FNU) | Depth<br>(m) | Chla<br>(µg/l) | BGA<br>(µg/l) |
|---------------|---------------|--------------------------|-----------------|---------------|----------------------|-------------------|-------------|----------------|--------------|----------------|---------------|
| Field Meter   | <u>15.76</u>  | <u>765.2</u>             | <u>91.5</u>     | <u>7.72</u>   | <u>41.26</u>         | <u>26.48</u>      | <u>8.04</u> | <u>/</u>       | <u>4.05</u>  | <u>/</u>       | <u>/</u>      |
| In situ Sonde | <u>15.909</u> | <u>765.2</u>             | <u>88.9</u>     | <u>7.5</u>    | <u>40.87</u>         | <u>26.2</u>       | <u>/</u>    | <u>/</u>       | <u>4.48</u>  | <u>/</u>       | <u>/</u>      |

**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, A External Screen: \_\_\_\_\_ Temp/Cond: \_\_\_\_\_

ODO Probe: \_\_\_\_\_ pH Probe: \_\_\_\_\_ Turbidity: \_\_\_\_\_

**Post Deployment**

Post Deployment Reading Date

1/10/23

Battery Voltage

2.59

Central Wiper Parking 180°

☒ Y ☐ N

Barometric Pressure (mmHg)

762.0

Conductivity Cell Constant

1.048

pH7 (mv)

/

pH10 (mv)

/

pH Slope

/

pH4 (mv)

/

| Parameter                   | Temp<br>(°C)  | Sp. Cond.<br>(mS/cm) | Depth<br>(m) | ODO<br>(% Sat.) | ODO<br>(mg/l) | pH7      | pH10     |
|-----------------------------|---------------|----------------------|--------------|-----------------|---------------|----------|----------|
| Standard                    | <u>21.79</u>  | <u>50000</u>         | <u>0.000</u> | <u>100.0</u>    | <u>8.9</u>    | <u>/</u> | <u>/</u> |
| Measured<br>(clean sensors) | <u>21.794</u> | <u>44508</u>         | <u>0.000</u> | <u>99.8</u>     | <u>8.88</u>   | <u>/</u> | <u>/</u> |

| Parameter                   | pH4<br>(check) | Turbidity Low<br>(FNU) | Turbidity High<br>(FNU) | Chl Low<br>(µg/l) | Chl High<br>(µg/l) | BGA-PE Low<br>(µg/l) | BGA-PE High<br>(µg/l) |
|-----------------------------|----------------|------------------------|-------------------------|-------------------|--------------------|----------------------|-----------------------|
| Standard                    | <u>/</u>       | <u>/</u>               | <u>/</u>                | <u>/</u>          | <u>/</u>           | <u>/</u>             | <u>/</u>              |
| Measured<br>(clean sensors) | <u>/</u>       | <u>/</u>               | <u>/</u>                | <u>/</u>          | <u>/</u>           | <u>/</u>             | <u>/</u>              |

Any Probe Malfunctions?

☒ Y ☐ N

If Y, describe in the comments.

File Name:

CC12192022

(Station name \_YYYYMMDD)

Comments:

Recorded By

K. Villinger

Computer Entry By / Date

Certified By / Date