## 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

**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 3/6/23

| 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. | K. Villinger | 4/17/23 | 926 | 22.4 | 759.9 | 8.7 | — | 100.0 | — | 1.014 | (P) F | (L) F |
| ICV | | | 928 | 22.1 | 759.4 | 8.7 | 8.7 | 99.7 | — | 1.014 | (P) F | (L) F |
| CCV | | 5/1/23 | 1601 | 22.1 | 754 | 8.7 | 8.74 | 99.9 | — | 1.014 | (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 µmhos/cm | Meter Reading µmhos/cm | Pass / Fail | Lab / Field |
|---|---|---|---|---|---|---|---|---|---|
| Calibr. | K Villinger | 4/17/23 | 955 | 220719C | 7/23 | 50,000 | 50,000 | (P) F | (L) F |
| ICV | | | 959 | 230310 | 2/24 | 15000 | 14960 | (P) F | (L) F |
| CCV | | 5/1/23 | 1605 | 220719C | 7/23 | 50000 | 50025 | P / F | L / F |
| CCV | | | | | | | | 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: 3/6/23
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 | K Villinger | 4/17/23 | 1002 | 0.000 | 0.000 | (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): ELSA

Calibration Date: 4/17/23 Calibrated By: KVillinger

Battery Voltage Pre-Calibration: 2.47 Battery Voltage >5.3: Y (N) Battery Voltage Post-Calibration: 2.42

Central Wiper Replaced: Y (N) Central Wiper Parking 180°: (Y) / N

Barometric Pressure (mmHg): 760 Conductivity Cell Constant: 0.47 ODO Gain: 1.014

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 | — | 50.000 | 0.000 | 100.0 | 8.7 | | |
| Measured | — | 49.943 | 0.000 | 99.7 | 8.70 | | |
| Calibrated | | 50.000 | 0.000 | 100.0 | — | | |

| 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: KVillinger, Niki Barnum File Name: CC04172023
(Station name_YYYYMMDD)

Sonde Start Date: 4/17/23 Sonde Start Time: 11:45 Eastern Standard Time (EST)

Actual Deployment Date: 4/17/23 Actual Time Placed in Water: 11:50 (EST)

Comments:

NIST thermometers are getting verified - can't verify sonde temp

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

Observation Description:

Recorded By: KVillinger 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): E1502
Retrieved By: KVillings
Retrieval Date: 5/1/23
Retrieval Time: 1011 (EST)
Field Meter # (SN): L1C
Field Meter Calibration Date: 5/1/23

**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 | 23.753 | 757.2 | 87.2 | 6.42 | 37.89 | 24.05 | X | X | 3.719 | X | X |
| In situ Sonde | 23.84 | 757.2 | 87.2 | 64.2 | 37.66 | 23.89 | X | X | 3.708 | X | X |

**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: A, C, E, F External Screen:_____ Temp/Cond:_____

ODO Probe:_____ pH Probe:_____ Turbidity:_____

## Post Deployment

Post Deployment Reading Date: 5/1/23 Battery Voltage: 2.4 Central Wiper Parking 180°: (Y) N

Barometric Pressure (mmHg): 754 Conductivity Cell Constant: 0.47

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 | 22.19 | 50.~~888~~ | 0.000 | 100.0 | 8.7 | X | X |
| Measured (clean sensors) | 22.19 | 50.025 | 0.000 | 99.9 | 8.74 | X | X |

| 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)
If Y, describe in the comments.

File Name: CC04172023
(Station name _YYYYMMDD)

Comments:

Recorded By: KVillings Computer Entry By / Date:_____

Certified By / Date:_____