

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: MOE

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 8/1/22

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.	<u>K. Villinger</u>	<u>10/17/22</u>	<u>1041</u>	<u>23.2</u>	<u>758.8</u>	<u>8.5</u>	<u>-</u>	<u>99.8</u>	<u>-</u>	<u>1.074</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>1045</u>	<u>23.0</u>	<u>758.7</u>	<u>8.6</u>	<u>8.63</u>	<u>100.0</u>	<u>-</u>	<u>1.074</u>	<u>(P) F</u>	<u>(L) F</u>
CCV		<u>11/15/22</u>	<u>1030</u>	<u>22.78</u>	<u>760.4</u>	<u>8.6</u>	<u>8.68</u>	<u>100.6</u>	<u>-</u>	<u>1.074</u>	<u>P / F</u>	<u>L / F</u>
CCV											<u>P / F</u>	<u>L / F</u>

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.	<u>K. Villinger</u>	<u>10/17/22</u>	<u>1051</u>	<u>120225B</u>	<u>3/23</u>	<u>50000</u>	<u>50000</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>1055</u>	<u>211122A</u>	<u>12/22</u>	<u>15000</u>	<u>14886</u>	<u>(P) F</u>	<u>(L) F</u>
CCV		<u>11/15/22</u>	<u>1642</u>	<u>120225B</u>	<u>3/23</u>	<u>50000</u>	<u>50058</u>	<u>(P) F</u>	<u>(L) F</u>
CCV								<u>P / F</u>	<u>L / F</u>

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.						<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 ± 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: 8/1/22

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	<u>K. Villinger</u>	<u>10/17/22</u>	<u>1056</u>	<u>0.000</u>	<u>0.000</u>	<u>(P) F</u>	<u>(L) F</u>

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
 Datasheet v1.42 (11/2019) — **DEPLOYMENT**

Station Name

TIMUclap02

Calibration / Pre-Deployment

Instrument (Sonde) # (SN) ELSA MOE
 Calibration Date 10/17/22 Calibrated By K. Villinger
 Battery Voltage Pre-Calibration 2.47 Battery Voltage >5.3 ☒ Y ☐ N Battery Voltage Post-Calibration 2.44
 Central Wiper Replaced ☒ Y ☐ N Central Wiper Parking 180° ☒ Y ☐ N
 Barometric Pressure (mmHg) 758.9 Conductivity Cell Constant 0.46382 ODO Gain 1.074
 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>23.07</u>	<u>50.000</u>	<u>0.000</u>	<u>100.0</u>	<u>8.5</u>		
Measured	<u>22.995</u>	<u>50.000</u>	<u>0.000</u>	<u>100.0</u>	<u>8.53</u>		
Calibrated		<u>50.000</u>	<u>0.000</u>	<u>99.8</u>	<u>8.5</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 10172022
 (Station name _YYYYMMDD)
 Sonde Start Date: 10/17/2022 Sonde Start Time: 1335 Eastern Standard Time (EST)
 Actual Deployment Date: 10/17/2022 Actual Time Placed in Water: 1320 (EST)

Comments:

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

Observation Description:

Recorded By: K. Villinger 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)

40e

Retrieved By

K. Villinger, B. Davis

Retrieval Date

11/15/22

Retrieval Time

1037 (EST)

Field Meter # (SN)

Lilo

Field Meter Calibration Date

11/8/22

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	21.14	764.7	86.2	7.23	17.2	10.13	/	/	3.77	/	/
In situ Sonde	21.11	764.7	86.7	7.27	17.12	10.1	/	/	4.358	/	/

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, B, O External Screen: _____ Temp/Cond: _____

ODO Probe: _____ pH Probe: _____ Turbidity: _____

Post Deployment

Post Deployment Reading Date 11/15/22 Battery Voltage 2.24 Central Wiper Parking 180° Y / N

Barometric Pressure (mmHg) 761.6 Conductivity Cell Constant 0.463582

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	23.05	50.000	0.000	100.0	8.6	/	/
Measured (clean sensors)	23.012	50.058	0.038	100.6	8.67	/	/

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: _____

If Y, describe in the comments.

(Station name _YYYYMMDD)

Comments:

Recorded By K. Villinger Computer Entry By / Date _____

Certified By / Date _____