

used as "field meter" on 7/8/21

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: 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 7/8/21

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 Applchy	7/8/21	1240	20.2	762.2	9.1	✓	100.3	-	1.018	(P) F	(L) F
ICV	↓	↓	1242	20.17	762.0	9.1	9.09	100.3	-	1.018	(P) F	(L) F
CCV	↓	7/21/21	1630	22.1	760.5	8.7	8.74	100.2	-	1.018	(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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Kim Applchy	7/8/21	1254	210426E	5/2022	50.000	50.000	(P) F	(L) F
ICV	↓	↓	1257	210426D	5/2022	20.000	19.939	(P) F	(L) F
CCV	↓	7/21/21	1630	210426E	5/2022	50.000	49.866	(P) F	(L) F
CCV								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: 5/27/21

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 Applchy	7/8/21	1300	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 7/19/21

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: Guillermo

RQ-

Project: BMAP (lapboard)

truck

- 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 7/13/21

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	7/19/21	820	19.0	763.8	9.3	-	100.5	-	1.039861	☒ F	☒ F
ICV	↓	↓	824	19.4	763.8	9.3	9.31	101.0	-	1.039861	☒ F	☒ F
CCV	↓	8/2/21	1622	22.0	760.9	8.8	8.81	100.8	-	1.039861	☒ F	☒ 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	7/19/21	830	210426E	5/2022	50,000	50,000	☒ F	☒ F
ICV	↓	↓	835	210426D	5/2022	20,000	19,932	☒ F	☒ F
CCV	↓	8/2/21	1630	210426E	5/2022	50,000	49,615	☒ F	☒ F
CCV								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: 7/13/21

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	7/19/21	840	0.00	0.00	☒ F	☒ F

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

COMMENTS:

6

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

Station Name

TIMUclap02

Calibration / Pre-Deployment

Instrument (Sonde) # (SN) ELSACalibration Date 7/8/21Calibrated By Kim ApplebyBattery Voltage Pre-Calibration 2.99Battery Voltage >5.3 Y / N
 (Exos)Battery Voltage Post-Calibration 2.99Central Wiper Replaced Y / NCentral Wiper Parking 180° Y / NBarometric Pressure (mmHg) 762.3Conductivity Cell Constant 0.470065ODO Gain 1.008pH7 (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>23.29</u>	<u>50.00</u>	<u>0.00</u>	<u>100.0</u>	<u>9.1</u>		
Measured	<u>23.62</u>	<u>50.00</u>	<u>0.00</u>	<u>100.3</u>	<u>9.09</u>		
Calibrated		<u>50.00</u>	<u>0.00</u>	<u>100.3</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_20210708
 (Station name _YYYYMMDD)Sonde Start Date: 7/8/2021 Sonde Start Time: 1430 Eastern Standard Time (EST)Actual Deployment Date: 7/8/2021 Actual Time Placed in Water: 1420 (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)

E.L.S.A.

Retrieved By

7/19/21

Retrieval Date

7/19/21

Retrieval Time

1022

(EST)

Field Meter # (SN)

Guillermo

Field Meter Calibration Date

7/19/21

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	29.24	764.5	68.5	4.82	25.628	15.56			2.57		
In situ Sonde	29.22		30.2	2.13	24.703	14.94			2.54		

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: N External Screen: - Temp/Cond: N

ODO Probe: N pH Probe: - Turbidity: -

Post Deployment

Post Deployment Reading Date 7/21/21 Battery Voltage 2.72 Central Wiper Parking 180° ☒ Y / ☐ N

Barometric Pressure (mmHg) 760.5 Conductivity Cell Constant 0.470065

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	24.00	50.00	0.00	100.0	8.7		
Measured (clean sensors)	24.07	49.87	0.00	100.2	8.74		

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:

TIMUclap02-20210708

(Station name _YYYYMMDD)

Comments:

Recorded By Kim Appleby Computer Entry By / Date _____

Certified By / Date _____