

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:

5 Fitch

RQ:

2020-01-27-44

Project:

Algal Bloom Report

- 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

10/19/20 2/20

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. Appleby	2/17/20	805	22.9	759.2	8.6	8.57	99.9	—	1.04	P/F	L/F
ICV	↓	↓	813	23.0	759.2	8.6	8.57	99.9	—	1.04	P/F	L/F
CCV	AKalmbacher	2-17-20	1605	22.0	759.5	8.7	8.74	100.2	—	1.04	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 #	Explr. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	K. Appleby	2/17/20	815	191018	10/2020	1000	1000	P/F	L/F
ICV	↓	↓	820	191025	11/2020	19615	19615	P/F	L/F
CCV	AKalmbacher	2-17-20	1608	191018	10/2020	1,000	999	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 #	Explr. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	K. Appleby	2/17/20	836	2902778	1/21	7.00	23.5	7.00	-22.2	P/F	L/F
Calibr.	↓	↓	843	2904300	3/21	4.00	23.5	4.00	157.6	P/F	L/F
Calibr.	↓	↓	847	2810555	4/20	10.00	23.5	9.97	-194.0	P/F	L/F
ICV	↓	↓	850	2902778	1/21	7.00	23.6	7.06	-22.8	P/F	L/F
CCV	AKalmbacher	2-17-20	1610	2907062	7/2021	4.0	24.4	4.00	157.1	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: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: 10/19/20 2/20

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. Appleby	2/17/20	851	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:

Cyanobacteria Bloom Response Field Data Sheet

2020 - 01-27-21 RQ-2019		Collected By: Kimberly Appleby, Brian Davis, Amy Kalmbacher								
Customer	21FLA	Field Report Prepared By:	K. Appleby							
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
Field ID: HAB Spombill Pond Off Boardwalk WIN=NEHAB0001 HAB02172020		THERMO FISHER SCIENTIFIC 525 NORTH MARK STREET MIAMI, FL 33136 1-800-456-2711 Container: 1:1 H2SO4 DANGER: 7004-02-4 7703-10-4 May be corrosive to metals. Causes severe skin burns and irritation. Do not breathe fumes/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection clothing. Avoid contact with skin. If SWALLOWED, rinse mouth. Do NOT induce vomiting. If ON SKIN (or hair), remove/soak off immediately all contaminated clothing. Rinse skin with water/shower. If INHALED, remove victim to fresh air and keep as still as possible. Consult a physician for treatment. IF IN EYES, Rinse cautiously with water for several minutes. Holding eye closed. Do not remove contact lenses. Continue rinsing with a minimum 15 min flow.								
		Comments:								
		Collection Equipment:	Pole, sampling bottle							
Matrix:	Salt	Grab	Coordinates: 30.50734, -81.457310							
Tide:	☒ Rising ☐ Falling ☐ Slack ☐ N/A	High Tide Time:	1600							
		Low Tide Time:								
Water Quality										
Date	Time ☒ EST ☐ CEN	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPT)	Secchi Disk (m)	Total Depth (m)
2-17-20	1405	10.97	142.1	18.8	8.14	0.05	46749	30.43	0.1 VOB	0.1
Bloom Observations										
Algal Bloom Observed? ☐ Yes ☒ No										
Water Surface	☒ Clear	☐ Scum	☐ Globs	☐ Slick						
Water Clarity	☒ Clear	☐ Slightly Turbid	☐ Turbid	☐ Opaque						
Bloom Color	☐ Green	☐ Red	☐ Brown	☒ Other: N/A						
Algae Distribution	☐ Suspended in water column	☐ On surface	☒ Other: N/A							
Water Odors	☒ Normal	☐ Sewage	☐ Petroleum	☐ Chemical	Other: _____					
Parameter Suite	Parameter Methods		Preservation	pH Check	#Bottles Sent to Lab	Bottle Group				
Bloom ID (PT-50ML)	☒ BLOOM-ID		☒ Ice		1	A				
Chlorophyll (BP-1L)	☒ CHLSUITE-W		☒ Ice		1	B				
Toxins (BG-WD250)	☒ W-MCYST-AA		☒ Ice		1	B				
Preserved Nutrients (500mL HDPE)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP		☒ Ice ☒ H2SO4	☒ <2	1	B				
	Lot	SA9301030	Exp:	10/2020	☒ <2					
Filtered Nutrients (P125mL)	☒ W-PO4-F		☒ Field Filtered 0.45um Filter	☒ Ice		1	B			
Quantitative Algae	☒ DTY-QN-C / PKD-QN-C		☒ Ice	☒ Lugols		1	C			
Relinquished By:	Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
Kimberly Appleby	2/17/20 1600		1							

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Algal Bloom Response- NERO

Customer: WQAP

Requester: Jeremy M. ParishField Report Prepared By: A. Kalmbacher

Project ID: BLOOM-RESP

Collected By: B. DavisSampling Agency: FDEP/NE ROC

Location HAB Spoonbill Pond off Boardwalk		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 2/17/20 Time 1405	☒ Eastern ☐ Central	Composite end Date — Time —	Bottle Group(s) (See pg 2) A, B, L
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Salt	Diss. Oxygen 10.97	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) —	
WIN/STORET #		Temp (C) 18.8	pH 8.14	Sample Depth 0.05	☐ ft ☒ m	Sp. Conductance (umho/cm) 46749
Latitude 30.50734	☒ dd ☐ dms	Longitude -81.457310	☒ dd ☐ dms	Salinity (ppt) 30.43	Comments	
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	☐ Eastern ☐ Central	Composite end Date Time	Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments	
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	☐ Eastern ☐ Central	Composite end Date Time	Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments	
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	☐ Eastern ☐ Central	Composite end Date Time	Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments	

Relinquished By: <u>A. Kalmbacher</u>	Date/Time 02-17-2020	Shipping Method FedEx	Number of Coolers Shipped: 1	Received By:	Date/Time
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