

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: Stitch

RQ: 2023-02-13-15

Project: Algae Resample (Seagrass)

Lake

- 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 2/15/23

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. Halbert	3/2/23	801	21.8	761.1	8.8	—	100.2	—	1.074	(P)/F	(L)/F
ICV	K. Halbert	3/2/23	805	21.6	761.1	8.8	8.85	100.4	—	1.074	(P)/F	(L)/F
CCV	K. Halbert	3/2/23	1450	22.4	757.2	8.7	8.73	100.6	—	1.074	(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.	K. Halbert	3/2/23	807	221028A	1/2/2023	1000	1000	(P)/F	(L)/F
ICV	K. Halbert	3/2/23	810	220719B	07/2023	100	99.8	(P)/F	(L)/F
CCV	K. Halbert	3/2/23	1451	221028A	1/2/2023	1000	1003	(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.	K. Halbert	3/2/23	812	M241-15	9/1/24	7.01	22.3	7.01	-45.5	(P)/F	(L)/F
Calibr.	K. Halbert	3/2/23	815	M188-01	7/11/24	4.00	22.3	4.00	131.6	(P)/F	(L)/F
Calibr.	K. Halbert	3/2/23	820	M334-14	11/29/24	10.03	22.3	10.03	-214.6	(P)/F	(L)/F
ICV	K. Halbert	3/2/23	825	M188-01	7/11/24	4.00	22.3	4.00	130.7	(P)/F	(L)/F
CCV	K. Halbert	3/2/23	1453	M241-15	9/1/24	7.01	22.2	7.07	-45.6	(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 10 169.1, slope from 4 to 7 177.1 (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: 2/9/23

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. Halbert	3/2/23	826	0.000	0.001	(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 (2022-08-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2023-02-13-15				Collected By:		Katrin Villinger, Katherine Halbert					
Customer:		WQMP		Field Report Prepared By:		Katherine Halbert					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: George's Lake @ Boat Ramp				Comments: Light breeze coming from South moving North.							
Field ID: NEHAB0099				Coordinates:		29.80235, -81.84544					
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle					
WIN ID:NEHAB0099				High Tide Time:				Low Tide Time:			
Matrix:		Fresh		Grab		Tide:		☐ Rising ☐ Falling ☐ Slack ☒ N/A			
Water Quality											
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPTH)	
03/02/2023	11:15	88.6	7.64	22.7	5.85	0.3	0.96	0.2	54.1	0.02	
Bloom Observations											
Algal Bloom Observed? ☒ Yes ☐ No											
Water Clarity		☐ Clear		☐ Slightly Turbid		☒ Turbid		☐ Opaque			
Bloom Color		☒ Green		☐ Red		☐ Brown		☐ Other:			
Algae Type		☒ Planktonic		☐ Filamentous		☐ Other:					
Algae Accumulation		☐ Mat		☒ Specks		☒ Scum		☒ Glob			
Algae Distribution		☐ Surface-Entire		☐ Surf-Localized		☒ Surf-Windblown		☒ Suspended		☐ Benthic ☐ Epiphytic	
Parameter Suite		Parameter Methods				Preservation		pH Check	#Bottles Sent to Lab	Bottle Group	
Algal ID (PT-50mL)		☐ ALGAL-ID				☐ Ice					
Bloom ID (PT-50mL)		☒ BLOOM-ID				☒ Ice			1	A	
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	B	
Toxins (P-125/BG-250)		☒ W-MCYST-AA ☐ W-SAXTN-MS ☐ OV-TOXN				☒ Ice			1	B	
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	B	
		Acid Lot:		SA2145160		Exp:		06/02/23			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B	
				Filter Lot # 175533							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped		Received By:			Date/Time		
Katherine Halbert		03/02/2023 16:30		1							



Cyanobacteria Bloom Response Field Data Sheet (2022-08-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2023-02-13-15				Collected By:		Katrin Villinger, Katherine Halbert				
Customer:		WQMP		Field Report Prepared By:		Katherine Halbert				
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC				
Location: George's Lake @ Center HAB				Comments: No strong wind conditions; light breeze moving South to North. Blanks taken for filtered nutrients, preserved nutrients, and toxins (Bottle group D, FB03022023).						
Field ID: NEHAB0098				Coordinates:		29.79538, -81.84957				
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle				
WIN ID: NEHAB0098				High Tide Time:				Low Tide Time:		
Matrix:		Fresh		Grab		Tide:		☐ Rising ☐ Falling ☐ Slack ☒ N/A		
Water Quality										
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPTH)
03/02/2023	10:45	105.6	9.09	22.8	6.52	0.3	5.28	0.6	53.8	0.02
	10:52	97.6	8.51	22.2	6.08	2			54	0.02
	10:48	71.7	6.43	20.7	5.72	4.78			54.8	0.02
Bloom Observations										
Algal Bloom Observed? ☒ Yes ☐ No										
Water Clarity		☐ Clear		☒ Slightly Turbid		☐ Turbid		☐ Opaque		
Bloom Color		☒ Green		☐ Red		☐ Brown		☐ Other:		
Algae Type		☒ Planktonic		☐ Filamentous		☐ Other:				
Algae Accumulation		☐ Mat		☒ Specks		☐ Scum		☐ Glob		
Algae Distribution		☐ Surface-Entire		☐ Surf-Localized		☐ Surf-Windblown		☒ Suspended ☐ Benthic ☐ Epiphytic		
Parameter Suite		Parameter Methods				Preservation		pH Check	#Bottles Sent to Lab	Bottle Group
Algal ID (PT-50mL)		☐ ALGAL-ID				☐ Ice				
Bloom ID (PT-50mL)		☒ BLOOM-ID				☒ Ice			1	A
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	B
Toxins (P-125/BG-250)		☒ W-MCYST-AA ☒ W-SAXTN-MS ☐ OV-TOXN				☒ Ice			1	B
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	B
		Acid Lot:		SA2229010		Exp:		08/30/23		
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45µm Filter		☒ Ice			1	B
				Filter Lot # 175533						
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols				
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time	
Katherine Halbert		03/02/2023 16:30		1						



Cyanobacteria Bloom Response Field Data Sheet (2022-08-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2023-02-13-15		Collected By:		Katrin Villinger, Katherine Halbert						
Customer:	WQMP	Field Report Prepared By:		Katherine Halbert						
Project ID:	BLOOM_RESP	Sampling Agency:		NEROC						
Location: George's Lake @ Center HAB			Comments: 03/02/2023 10:50 ET DISource:NEROC Lab DILocation: Boat Container ID/Type: Carman / Carboy							
Field ID: FB_03022023			Coordinates:							
WIN Secondary Resource Type:			Collection Equip:							
WIN ID:			High Tide Time:		Low Tide Time:					
Matrix:	Field Blank	Grab	Tide: ☐ Rising ☐ Falling ☐ Slack ☐ N/A							
Water Quality										
Date	Time ☐ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPTH)
Bloom Observations										
Algal Bloom Observed? ☐ Yes ☐ No										
Water Clarity	☐ Clear	☐ Slightly Turbid	☐ Turbid	☐ Opaque						
Bloom Color	☐ Green	☐ Red	☐ Brown	☐ Other: _____						
Algae Type	☐ Planktonic	☐ Filamentous	☐ Other: _____							
Algae Accumulation	☐ Mat	☐ Specks	☐ Scum	☐ Glob						
Algae Distribution	☐ Surface-Entire	☐ Surf-Localized	☐ Surf-Windblown	☐ Suspended	☐ Benthic ☐ Epiphytic					
Parameter Suite	Parameter Methods		Preservation		pH Check	#Bottles Sent to Lab	Bottle Group			
Algal ID (PT-50mL)	☐ ALGAL-ID		☐ Ice							
Bloom ID (PT-50mL)	☐ BLOOM-ID		☐ Ice							
Chlorophyll (BP-1L)	☐ CHLSUITE-W		☐ Ice							
Toxins (P-125/BG-250)	☒ W-MCYST-AA	☒ W-SAXTN-MS	☐ OV-TOXN	☒ Ice		1	D			
Preserved Nutrients (500mL HDPE)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP		☒ Ice	☒ H2SO4	☐ <2	1	D			
	Acid Lot:	SA2145160	Exp:	06/02/23						
Filtered Nutrients (P125mL)	☒ W-PO4-F	☒ Field Filtered 0.45um Filter		☒ Ice		1	D			
		Filter Lot #	175533							
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C		☐ Ice	☐ Lugols						
Relinquished By:	Date/Time	Number of Coolers Shipped		Received By:	Date/Time					
Katherine Halbert	03/02/2023 16:30	1								