

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: 2023-03-06-56

Project: Algae Research

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	4/18/23	8:12	21.8	761.9	8.8	—	100.2	—	1.069	P/F	L/F
ICV	K Halbert	4/18/23	8:13	21.7	761.9	8.8	8.84	100.4	—	1.069	P/F	L/F
CCV	K Halbert	4/18/23	15:36	22.0	761.5	8.8	8.75	100.0	—	1.069	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	K Halbert	4/18/23	8:14	230131B	02/2024	1000	1000	P/F	L/F
ICV	K Halbert	4/18/23	8:16	220719B	07/2023	100	100.1	P/F	L/F
CCV	K Halbert	4/18/23	15:37	230131B	02/2024	1000	1000	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	4/18/23	8:20	m241-15	9/1/24	7.01	22.1	7.01	-46.4	P/F	L/F
Calibr.	K Halbert	4/18/23	8:22	m346-07	12/11/24	4.00	22.1	4.00	129.6	P/F	L/F
Calibr.	K Halbert	4/18/23	8:24	m334-14	11/29/24	10.04	22.0	10.04	-215.5	P/F	L/F
ICV	K Halbert	4/18/23	8:26	m346-07	12/11/24	4.00	21.9	4.00	129.9	P/F	L/F
CCV	K Halbert	4/18/23	15:39	m241-15	9/1/24	7.01	22.2	7.02	-44.1	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 7 176.0 (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	4/18/23	8:27	0.000	0.002	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 - 2023-03-06-56				Collected By:		Katrin Villinger, Katherine Halbert				
Customer:		WQMP		Field Report Prepared By:		Katherine Halbert				
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC				
Location: GEORGES LAKE AT CENTER HAB				Comments: Strong wind conditions on lake.						
Field ID: NEHAB0098				Coordinates:		29.79526, -81.84909				
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)
04/18/2023	12:10	92.5	7.88	23.4	6.16	0.3	5.18	0.6	54.9	0.02
	12:13	90.8	7.77	23.1	6.12	2			54.9	0.02
	12:10	81.7	7.03	22.8	6.03	4.68			55.1	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:		SA2229010		Exp:		08/30/23		
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B
				Filter Lot # 0000175533						
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols				
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time	
Katherine Halbert		04/18/2023 16:30		1						



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

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RQ - 2023-03-06-56				Collected By:		Katrin Villinger, Katherine Halbert					
Customer:		WQMP		Field Report Prepared By:		Katherine Halbert					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: GEORGES LAKE AT BOAT RAMP				Comments: A single dead fish present at sample site.							
Field ID: NEHAB0099				Coordinates:		29.80213, -81.84549					
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)	
04/18/2023	12:30	78.9	6.94	21.7	6.02	0.26	0.56	0.4	56.1	0.03	
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 0.45um Filter		☒ Ice			1	B	
				Filter Lot # 0000175533							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped				Received By:		Date/Time	
Katherine Halbert		04/18/2023 16:30		1							



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RQ - 2023-03-06-56				Collected By:		Katrin Villinger, Katherine Halbert					
Customer:		WQMP		Field Report Prepared By:		Katherine Halbert					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Swan Lake at 114 Serenity Dr				Comments:							
Field ID: NEHAB0100				Coordinates:		29.73588, -82.00730					
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle					
WIN ID:NEHAB0100				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)	
04/18/2023	10:50	85	7.22	23.5	6.11	0.3	2.1	2.1	39	0.02	
	10:57	83.1	7.07	23.4	6.14	1.4			39.1	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					
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	B	
		Acid Lot:		SA2145169		Exp:		06/02/23			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter			☒ Ice		1	B	
		Filter Lot #			0000175533						
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time		
Katherine Halbert		04/18/2023 11:04		1							