

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: DESI

RQ: 2023-01-02-48

Project: George's Lake algal bloom response

- 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 11/14/22

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.	K. Villingers	1/30/23	7:37	21.0	765	9.0	—	100.7	—	1.0403	(P) F	(L) F
ICV			7:40	21.0	765.1	9.0	8.98	100.7	—	1.0403	(P) F	(L) F
CCV	Niki Barham	1/30/23	15:01	21.9	762.7	8.8	8.96	102.3	—	1.0403	(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. Villingers	1/30/23	7:43	221028A	11/2023	1000	1000	(P) F	(L) F
ICV			7:47	220719B	7/2023	100	99.9	(P) F	(L) F
CCV	Niki Barham	1/30/23	15:05	220719B	7/2023	100	99.7	(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. Villingers	1/30/23	7:51	M118-15	5/2/24	7.02	21.4	7.02	-23.5	(P) F	(L) F
Calibr.			7:55	M118-01	7/11/24	4.00	21.2	4.00	153.8	(P) F	(L) F
Calibr.			7:59	M103-01	4/19/24	10.03	21.7	10.03	-193.9	(P) F	(L) F
ICV			8:04	M188-01	7/11/24	4.00	21.2	3.97	155.0	(P) F	(L) F
CCV	Niki Barham	1/30/23	15:08	M118-15	5/2/24	7.01	22.1	7.06	-23.4	(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 10 170.4, slope from 4 to 7 172.3 (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: 11/14/22

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	K. Villingers	1/30/23	8:09	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 (2022-08-15 v1)

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

RQ - 2023-01-02-48				Collected By:		Katrin Villinger, Niki Barham					
Customer:		WQMP		Field Report Prepared By:		Katrin Villinger					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: George's Lake @ Center HAB				Comments:							
Field ID: NEHAB0098				Coordinates:		29.79412, -81.84813					
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)	
01/30/2023	11:20	96.9	9.42	16.5	5.91	0.3	4.09	0.7	53.7	0.02	
	11:25	91.4	9.12	15.6	5.88	2			53.8	0.02	
	11:30	84.3	8.42	15.4	5.9	3.5			54	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	C	
Toxins (P-125/BG-250)		☒ W-MCYST-AA ☒ W-SAXTN-MS ☐ OV-TOXN				☒ Ice			1	C	
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	C	
		Acid Lot:		SA2299040		Exp:		11/04/23			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter			☒ Ice		1	C	
		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		
Katrin Villinger		01/30/2023 16:30		1							