

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: 2023-05-22-64

Project: Algae LSR

- 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 5/23/23

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.	KVillings	7/19/23	726	22.0	763.8	8.8	-	100.5	-	1.063	(P) F	(L) F
ICV			728	21.8	763.8	8.8	8.81	100.4	-	1.063	(P) F	(L) F
CCV			1654	22.9	763.4	8.6	8.64	100.6	-	1.063	(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.	KVillings	7/19/23	730	230131B	2/24	1000	1000	(P) F	(L) F
ICV			732	230131A	2/24	100	99.6	(P) F	(L) F
CCV			1655	230131D	2/24	15000	15039	(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.	KVillings	7/19/23	734	M241-15	9/1/24	7.01	22.6	7.01	-48.9	(P) F	(L) F
Calibr.			736	M221-22	8/10/24	4.00	22.5	4.00	126.1	(P) F	(L) F
Calibr.			738	M203-05	7/27/24	10.03	22.5	10.03	-219.1	(P) F	(L) F
ICV			740	M221-22	8/10/24	4.00	22.5	3.97	127.3	(P) F	(L) F
CCV			1656	M203-05	7/27/24	10.02	22.6	10.05	-221.1	(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 10 170.2, slope from 4 to 7 175 (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: 5/30/23

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	KVillings	7/19/23	741	0.000	0.000	(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 (2023-06-12 v1)

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

RQ - 2023-05-22-64				Collected By:		Katrin Villinger, Lydia Joyner					
Customer:		NE-DIST		Field Report Prepared By:		K VILLINGER					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: St. Johns River - N Little Lake George (Beecher's Point)				Comments: Algae came in waves, streaky. Microbial biofilm and naturally colored foam came is waves. 1 small dead fish floating along with foam.							
Field ID: NEHAB0106				Coordinates:		29.46435, -81.68335					
WIN Secondary Resource Type: River/Stream				Collection Equip:		WaterBottle					
WIN ID: NEHAB0106				High Tide Time:		05:14		Low Tide Time:		13:44	
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)	
07/19/2023	14:45	129.9	9.3	32.6	8.54	0.3	5.57	0.6	1225	0.6	
	14:46	123.7	8.94	32.4	8.5	2			1229	0.6	
	14:47	121.3	8.9	31.5	8.48	5			1226	0.6	
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	
Algae (PT-50mL)		☐ ALGAL-ID ☒ 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	
Physical/Aggregate		☒ W-COLOR				☒ Ice			1	C	
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	C	
		SA3013020		Acid Lot:		Exp:		1/25/24			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	C	
		Filter Lot #		R1EB01329							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time		
K VILLINGER		07/19/2023 16:30		1							



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RQ - 2023-05-22-64				Collected By:		Katrin Villinger, Lydia Joyner					
Customer:		NE-DIST		Field Report Prepared By:		K VILLINGER					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: St. Johns River - 5937 W Shores Rd				Comments:							
Field ID: NEHAB0107				Coordinates:		30.08655, -81.68973					
WIN Secondary Resource Type: River/Stream				Collection Equip:		WaterBottle					
WIN ID: NEHAB0107				High Tide Time:		14:34		Low Tide Time:		09:30	
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)	
07/19/2023	11:10	87	6.48	30.7	7.55	0.3	1.504	0.9	894	0.43	
	11:13	84.7	6.34	30.5	7.53	1			890	0.43	
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	
Algae (PT-50mL)		☐ ALGAL-ID ☒ 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	
Physical/Aggregate		☒ W-COLOR				☒ Ice			1	C	
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	C	
		Acid Lot:		SA229010		Exp:		8/30/23			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter			☒ Ice		1	C	
		Filter Lot #		R1EB01329							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time		
K VILLINGER		07/19/2023 16:30		1							



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RQ -2023-05-22-64				Collected By:		Katrin Villinger, Lydia Joyner					
Customer:		NE-DIST		Field Report Prepared By:		K VILLINGER					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Doctors Lake - Pace Island dock				Comments:							
Field ID: NEHAB0055				Coordinates:		30.13637, -81.72062					
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle					
WIN ID: NEHAB0055				High Tide Time:		14:01		Low Tide Time:		08:52	
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)	
07/19/2023	10:10	81.5	6.1	29.8	7.61	0.3	0.95	0.95	4520	2.39	
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	
Algae (PT-50mL)		☐ ALGAL-ID ☒ 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	
Physical/Aggregate		☒ W-COLOR				☒ Ice			1	C	
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice ☒ H2SO4		☒ <2	1	C	
		Acid Lot:		SA2229010		Exp:		08/30/23			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	C	
		Filter Lot #		R1EB01329							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
K VILLINGER		07/19/2023 16:30		1							