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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: Bruce RQ- 2022-04-11-48 Project: Algae Response O&M

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 2/3/22

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.	Brian Davis	4/6/22	822	22.0	757.6	8.7	✓	99.7	✓	1.03	(P) / F	(L) / F
ICV			826	21.9	757.6	8.7	8.73	99.7	✓	1.03	(P) / F	(L) / F
CCV			1653	22.6	756.2	8.6	8.61	99.7	✓	1.03	(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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Brian Davis	4/6/22	755	220225A	3/23	1000	1000	P / F	L / F
ICV			756	210917A	9/22	100	101.5	P / F	L / F
CCV			1654	220225A	3/23	1000	1000	P / F	L / F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 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.	Brian Davis	4/6/22	759	2112B19	12/23	7.01	22.5	7.01	-13.7	P / F	L / F
Calibr.			803	2201I788	1/24	4.00	22.2	4.00	164.9	P / F	L / F
Calibr.			808	2202A63	7/23	10.02	22.5	10.02	-184.9	P / F	L / F
ICV			816	2112B19	12/23	7.01	22.4	RR 6.98	-11.8	P / F	L / F
CCV			1659	2201D85	1/24	4.00	22.1	4.01	160.2	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 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 171.2, slope from 4 to 7 178.6 (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: 2/3/22
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	Brian Davis	4/6/22	824	0.00	0.00	(P) F	(L) F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

Cyanobacteria Bloom Response Field Data Sheet (2022-03-29 v5)

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

RQ - 2022-04-11-48		**Collected By:**	Kim Appleby, Brian Davis, Katrin Villinger
Customer:	21FLA	**Field Report Prepared By:**	Kim Appleby
Project ID:	BLOOM_RESP	**Sampling Agency:**	NEROC

Location: Orange lake-McIntosh Bay

Comments: High water level. Algae seen speckled throughout water column.

Field ID: NEHAB0065		**Coordinates:**	29.43633, -82.19149
WIN Secondary Type: Lake		**Collection Equip:**	WaterBottle
WIN ID: NEHAB0065		**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)
04/06/2022	11:25	107.7	9.05	24.2	8.81	0.3	2.51	0.9	77.2	0.04
						2				
	11:42	1.4	0.13	20.1	5.94	2			89.9	0.04

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 ID (PT-50mL)	☐ ALGAE-ID	☐ Ice			
Bloom ID (PT-50mL)	■ BLOOM-ID	■ Ice		1	A
Chlorophyll (BP-1L)	■ CHLSUITE-W	■ Ice		1	B
Toxins (BG-WD250)	■ W-MCYST-AA / W-SAXTN-MS	■ Ice		1	B
Preserved Nutrients (500mL HDPE)	■ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	■ Ice ■ H2SO4	■ <2	1	B
	Acid Lot: SA1105060	Exp: 4/30/22			
Filtered Nutrients (P125mL)	■ W-PO4-F	■ Field Filtered 0.45um Filter; Filter Lot # R1EB01329 ■ Ice		1	B
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
Kim Appleby	04/06/2022 16:00	1		

Cyanobacteria Bloom Response Field Data Sheet (2022-03-29 v5)

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

RQ - 2022-04-11-48		**Collected By:**	Katrin Villinger, Brian Davis, Kimberly Appleby
Customer:	WQAP	**Field Report Prepared By:**	Katrin Villinger
Project ID:	BLOOM_RESP	**Sampling Agency:**	NEROC

Location: Melrose Lake N Shore

Comments: Overcast, green color to water but algae not observed

Field ID: NEHAB0069		**Coordinates:**	29.71606, -82.05157
WIN Secondary Type: Lake		**Collection Equip:**	WaterBottle
WIN ID: NEHAB0069		**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)
04/06/2022	14:35	105.3	8.91	23.8	6.36	0.3	4.558	1.2	71.2	0.03
	14:42	91.5	8.03	21.5	5.98	2			71.7	0.03
	14:40	46.7	4.37	18.7	5.53	4.058			73.1	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
Algae ID (PT-50mL)	☐ ALGAE-ID	☐ Ice			
Bloom ID (PT-50mL)	■ BLOOM-ID	■ Ice		1	A
Chlorophyll (BP-1L)	■ CHLSUITE-W	■ Ice		1	B
Toxins (BG-WD250)	■ W-MCYST-AA / W-SAXTN-MS	■ Ice		1	B
Preserved Nutrients (500mL HDPE)	■ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	■ Ice ■ H2SO4	■ <2	1	B
	Acid Lot: SA1308030	Exp: 12/1/22			
Filtered Nutrients (P125mL)	■ W-PO4-F ☑ Field Filtered 0.45um Filter; Filter Lot # R1EB01329	■ Ice		1	B
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
Katrin Villinger	04/06/2022 14:48	1		