

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: 2022-08-01-66

Project: Algae Re. Orange L.

- 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 8/1/22

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.	<u>Brian Davis</u>	<u>8/3/22</u>	<u>841</u>	<u>23.9</u>	<u>762.3</u>	<u>8.5</u>	<u>8.5</u>	<u>100.3</u>	<u>✓</u>	<u>1.02</u>	P / F	L / F
ICV			<u>843</u>	<u>23.8</u>	<u>762.3</u>	<u>8.5</u>	<u>8.48</u>	<u>100.3</u>	<u>✓</u>	<u>1.02</u>	P / F	L / F
CCV			<u>1646</u>	<u>25.3</u>	<u>760.7</u>	<u>8.2</u>	<u>8.16</u>	<u>99.4</u>	<u>✓</u>	<u>1.02</u>	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.	<u>Brian Davis</u>	<u>8/3/22</u>	<u>815</u>	<u>220225A</u>	<u>3/23</u>	<u>1000</u>	<u>1000</u>	<u>P / F</u>	<u>L / F</u>
ICV			<u>817</u>	<u>210917A</u>	<u>9/22</u>	<u>100</u>	<u>101.0</u>	<u>P / F</u>	<u>L / F</u>
CCV			<u>1648</u>	<u>220225A</u>	<u>3/23</u>	<u>1000</u>	<u>975</u>	<u>P / F</u>	<u>L / F</u>
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.	<u>Brian Davis</u>	<u>8/3/22</u>	<u>826</u>	<u>4203887</u>	<u>2/24</u>	<u>7.00</u>	<u>24.3</u>	<u>7.00</u>	<u>-17.1</u>	P / F	L / F
Calibr.			<u>830</u>	<u>2205F75</u>	<u>5/24</u>	<u>4.00</u>	<u>24.3</u>	<u>4.00</u>	<u>166.9</u>	P / F	L / F
Calibr.			<u>834</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.01</u>	<u>24.2</u>	<u>10.01</u>	<u>-183.1</u>	P / F	L / F
ICV			<u>837</u>	<u>4203887</u>	<u>2/24</u>	<u>7.00</u>	<u>24.3</u>	<u>7.05</u>	<u>-13.5</u>	P / F	L / F
CCV			<u>1649</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.00</u>	<u>24.9</u>	<u>9.97</u>	<u>-184.9</u>	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 10 166, slope from 4 to 7 184 (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: 8/1/22

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	<u>Brian Davis</u>	<u>8/3/22</u>	<u>842</u>	<u>0.00</u>	<u>0.00</u>	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 (2022-06-10 v1)

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

RQ - 2022-08-01-66				Collected By:		Brian Davis, Kaatie Halbert					
Customer:		WQAP		Field Report Prepared By:		Katherine Halbert					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Orange Lake - McIntosh Bay				Comments:							
Field ID: NEHAB0065				Coordinates:		29.43828, -82.19209					
WIN Secondary Resource 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)	
08/03/2022	12:05	116.2	8.67	90.7	9.15	0.3	2.042	1.1	89.9	0.04	
	12:16	24.3	1.87	29.8	6.46	1.5			89.7	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	
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 (BG-WD250)		☒ 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 Acid Lot: SA2145160 Exp: 06/02/23				☒ Ice ☒ H2SO4		☒ <2	1	B	
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B	
		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			
Katie Halbert		08/03/2022 16:30		1							



Cyanobacteria Bloom Response Field Data Sheet (2022-06-10 v1)

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RQ - 2022-08-01-66				Collected By:		Brian Davis, Katie Halbert					
Customer:		WQAP		Field Report Prepared By:		Katie Halbert					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Orange Lake HAB Center				Comments:							
Field ID: NEHAB0075				Coordinates:		29.46533, -82.17910					
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle					
WIN ID: NEHAB0075				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)	
08/03/2022	12:44	145.5	10.71	31.8	9.34	0.3	3.075	0.6	94.1	0.04	
	12:50	66.2	4.94	30.7	7.02	2.5			88.4	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	
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 (BG-WD250)		☒ 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 #		R1EB01329							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice ☐ Lugols					
Relinquished By:		Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
Katie Halbert		08/03/2022 16:30		1							



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Customer:		WQAP		Field Report Prepared By:		Katie Halbert					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: 183rd Ave Canal off Cross Creek				Comments: Salvina minima							
Field ID: NEHAB0076				Coordinates:		29.48503, -82.16335					
WIN Secondary Resource Type: Canal				Collection Equip:		WaterBottle					
WIN ID: NEHAB0076				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)	
08/03/2022	13:15	7.6	0.58	28.5	6.35	0.2	0.4	0.4	209.6	0.1	
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 (BG-WD250)		☒ 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 Acid Lot: SA2145160 Exp: 06/02/23				☒ Ice ☒ H2SO4		☒ <2	1	B	
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B	
		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			
Katie Halbert		08/03/2022 16:30		1							