

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boxed "X" this box if there are qualified data on this page

Meter ID: Bruce

RQ: 2022-08-22-52

Project: Algae Orchard

River

- 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>Bruce Davis</u>	<u>9/12/22</u>	<u>907</u>	<u>24.2</u>	<u>760.1</u>	<u>8.4</u>	<u>8.39</u>	<u>100.0</u>	<u>✓</u>	<u>1.03</u>	<u>P/F</u>	<u>L/F</u>
ICV		<u>↓</u>	<u>908</u>	<u>24.3</u>	<u>760.1</u>	<u>8.4</u>	<u>8.39</u>	<u>100.2</u>	<u>✓</u>	<u>1.03</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>Katon Villinger</u>	<u>↓</u>	<u>1139</u>	<u>24.4</u>	<u>760.1</u>	<u>8.4</u>	<u>8.39</u>	<u>100.4</u>	<u>✓</u>	<u>1.03</u>	<u>P/F</u>	<u>L/F</u>
CCV											<u>P/F</u>	<u>L/F</u>

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.	<u>Bruce Davis</u>	<u>9/12/22</u>	<u>910</u>	<u>220225A</u>	<u>3/23</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV		<u>↓</u>	<u>911</u>	<u>210917A</u>	<u>9/22</u>	<u>15,000</u>	<u>15,012</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>K Villinger</u>	<u>↓</u>	<u>1141</u>	<u>220225A</u>	<u>3/23</u>	<u>1000</u>	<u>998</u>	<u>P/F</u>	<u>L/F</u>
CCV								<u>P/F</u>	<u>L/F</u>

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>Bruce Davis</u>	<u>9/12/22</u>	<u>914</u>	<u>M074-20</u>	<u>3/24</u>	<u>7.00</u>	<u>24.0</u>	<u>7.00</u>	<u>-10.1</u>	<u>P/F</u>	<u>L/F</u>
Calibr.		<u>↓</u>	<u>916</u>	<u>2205F96</u>	<u>5/24</u>	<u>4.00</u>	<u>24.7</u>	<u>4.00</u>	<u>166.0</u>	<u>P/F</u>	<u>L/F</u>
Calibr.		<u>↓</u>	<u>917</u>	<u>2202F29</u>	<u>8/23</u>	<u>10.01</u>	<u>24.3</u>	<u>10.01</u>	<u>-184.0</u>	<u>P/F</u>	<u>L/F</u>
ICV		<u>↓</u>	<u>721</u>	<u>M074-20</u>	<u>3/24</u>	<u>7.00</u>	<u>23.9</u>	<u>7.04</u>	<u>-11.3</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>K Villinger</u>	<u>↓</u>	<u>1143</u>	<u>2205F96</u>	<u>5/24</u>	<u>4.00</u>	<u>25.3</u>	<u>4.01</u>	<u>165.6</u>	<u>P/F</u>	<u>L/F</u>
CCV										<u>P/F</u>	<u>L/F</u>

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 10 172.9, slope from 4 to 7 176.1 (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>Bruce Davis</u>	<u>9/12/22</u>	<u>923</u>	<u>0.00</u>	<u>0.007</u>	<u>P/F</u>	<u>L/F</u>

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 - 2022-08-22-52				Collected By:		Brian Davis, Katrin Villinger					
Customer:		WQAP		Field Report Prepared By:		Brian Davis					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Ortega River @ Morven Canal				Comments: Login the DTY-QN-C/PKD-QN-C sample/s under a separate event, priority 12							
Field ID: NEHAB0090				Coordinates:		30.25259, -81.70317					
WIN Secondary Resource Type: River/Stream				Collection Equip:		Dipper					
WIN ID: NEHAB0090				High Tide Time:		07:00		Low Tide Time:		13:30	
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)	
09/12/2022	10:30	33.3	2.57	28	6.81	0.3	1.2	0.8	834	0.41	
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:		SA1245160		Exp:		6/2/23			
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B	
		Filter Lot #		175533							
Quantitative Algae		☒ DTY-QN-C / PKD-QN-C				☒ Ice ☐ Lugols			1	B	
Relinquished By:		Date/Time		Number of Coolers Shipped				Received By:		Date/Time	
Brian Davis		09/12/2022 16:30		1							



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RQ - 2022-08-22-52				Collected By:			Brian Davis, Katrin Villingner						
Customer:		WQAP		Field Report Prepared By:			Brian Davis						
Project ID:		BLOOM_RESP		Sampling Agency:			NEROC						
Location: Ortega River @ Morven Canal				Comments: 09/12/2022 10:35 ET DISource:NED Lab DILocation: NED Lab Container ID/Type: CarNB / Carboy									
Field ID: FB_09122022				Coordinates:									
WIN Secondary Resource Type:				Collection Equip:									
WIN ID:				High Tide Time:		07:00		Low Tide Time:		13:30			
Matrix:		Field Blank		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 (PPT _h)			
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							
Chlorophyll (BP-1L)		☐ CHLSUITE-W				☐ Ice							
Toxins (P-125/BG-250)		☒ W-MCYST-AA		☒ W-SAXTN-MS		☐ OV-TOXN			☒ Ice		1	D	
Preserved Nutrients (500mL HDPE)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☒ Ice		☒ H2SO4		☒ <2		1	D
		Acid Lot:	SA1245160			Exp:	6/2/23						
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter			☒ Ice			1	D		
				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					
Brian Davis	09/12/2022 16:30		1										