

Appendix A

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET (7-6-06 V2)

WATERBODY <i>Lyons Bay</i>		DATE (M/D/YY): <i>6/10/19</i>	TIME: (AM) <i>1110</i>	Case ID#:				
COUNTY: <i>Sarasota</i>	LOCATION: <i>Lyons Bay</i>		NEAREST TOWN/CITY: <i>Venice</i>					
Visit Type: Initial ☒ Recon ☐ Sampling ☐ Follow-up ☐	Samples collected: ☒ yes ☐ no	Samples submitted to: <i>FDEP Tallahassee</i>	Photos Taken: ☒ yes ☐ no					
Sample collection method: Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐								
Sample & Analysis types: Aqueous: ☒ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐								
Algal ID & enumeration: ☒ Nutrients: ☒ Chl-a: ☒ AGP: ☐ Turbidity: ☒ Toxin: ☒								
Estimated size of bloom: <i>/</i>		Impounded: ☐ yes ☒ no	Stream/River/Canal: ☐ m wide					
Lake/Estuary Typical depth: <i>1.5</i> m deep	Inflows: ☐ yes ☒ no	Typical Transect: ☐ m deep ☐ m deep ☐ m deep	Water velocity: ☐ m/s ☐ m/s ☐ m/s					
Outflows: ☐ yes ☒ no	Left bank		Middle	Right bank				
Canopy Cover: Open: ☒ Lightly Shaded (11-45%): ☐ Moderately Shaded (46-80%): ☐ Heavily Shaded: ☐								
Description of Bloom/		Latitude: Degrees Minutes Seconds	Longitude: Degrees Minutes Seconds					
Present Weather conditions								
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)								
Sketch bloom area on the attached map. Indicate wind direction.								
Last rain event								
Rainfall amount								
WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	D0%	Sal	Secchi (m)
Top	<i>0.3</i>	<i>30.4</i>	<i>8.05</i>	<i>5.86</i>	<i>53012</i>	<i>93.8</i>	<i>3483</i>	<i>1.4</i>
Mid-depth								
Bottom								
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order 5th - 6th order 7th order or greater) Lake: ☐ Wetland: ☐ Estuary: ☒ Other: ☐								
Water Odors (check box): Normal: ☒ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Other: ☐								
Water Surface (check box): Clear: ☒ Scum: ☐ Glob: ☐ Slick: ☐								
Water Clarity (check box): Clear: ☒ Slightly turbid: ☐ Turbid: ☐ Opaque: ☐								
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐								
Notes <i>Some Filamentous</i>					Abundance: Periphyton ☐ Absent ☒ Rare ☐ Common ☒ Abundant ☐ Fish ☐ ☐ ☒ ☐ Aquatic Macrophytes ☐ ☐ ☒ ☐ Iron/sulfur Bacteria ☒ ☐ ☐ ☐			
VISIT TEAM: <i>Matthew Bearden</i>					AGENCY: <i>SW ROC</i>			

BLOOM RESPONSE



Appendix A

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET (7-6-06 V2)

WATERBODY <i>Manatee River</i>		DATE (M/D/YY): <i>6/10/19</i>	TIME: (AM) <i>0945</i>	Case ID#:				
COUNTY: <i>Manatee</i>		LOCATION: <i>Near Robinson Preserve</i>	NEAREST TOWN/CITY: <i>Bradenton</i>					
Visit Type: Initial ☒ Recon ☐ Sampling ☐ Follow-up ☐	Samples collected: ☒ yes ☐ no	Samples submitted to: <i>FDEP - Tallahassee</i>	Photos Taken: ☒ yes ☐ no					
Sample collection method: Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐								
Sample & Analysis types: Aqueous: ☒ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐								
Algal ID & enumeration: ☒ Nutrients: ☐ Chl-a: ☐ AGP: ☐ Turbidity: ☒ Toxin: ☒								
Estimated size of bloom: <i>1</i>		Impounded: ☐ yes ☒ no	Stream/River/Canal ☐ m wide					
Lake/Estuary Typical depth: <i>0.8</i> m deep		Inflows: ☒ yes ☐ no	Typical Transect ☐ m deep ☐ m deep ☐ m deep					
Outflows: ☒ yes ☐ no		Water velocity ☐ m/s ☐ m/s ☐ m/s						
		Left bank Middle Right bank						
Canopy Cover: Open: ☒ Lightly Shaded (11-45%): ☐ Moderately Shaded (46-80%): ☐ Heavily Shaded: ☐								
Description of Bloom/ Present Weather conditions: <i>Tide Falling</i>		Latitude: Degrees Minutes Seconds Longitude: Degrees Minutes Seconds						
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)		Last rain event						
Sketch bloom area on the attached map. Indicate wind direction.		Rainfall amount						
WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	% DO	Sal	Secchi (m)
Top	<i>0.3</i>	<i>27.4</i>	<i>7.27</i>	<i>3.14</i>	<i>39587</i>	<i>46.0</i>	<i>21.5</i>	
Mid-depth								
Bottom								<i>0.4</i>
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order 5th - 6th order 7th order or greater) Lake: ☐ Wetland: ☐ Estuary: ☒ Other: ☐								
Water Odors (check box): Normal: ☒ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Other: ☐								
Water Surface (check box): Clear: ☐ Scum: ☒ Glob: ☒ Slick: ☐								
Water Clarity (check box): Clear: ☐ Slightly turbid: ☐ Turbid: ☒ Opaque: ☐								
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☒ Other: ☐								
Notes: <i>Collected at Robinson Preserve</i> <i>Filamentous algae present</i>					Abundance: Periphyton ☐ Absent ☐ Rare ☐ Common ☒ Abundant ☐ Fish ☐ Aquatic Macrophytes ☒ Iron/sulfur Bacteria ☒			

VISIT TEAM:

Matthew Bearden - Matt B AGENCY: *SWD ROC*

BLOOM RESPONSE



Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

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: Lera

RQ:

Project: 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 5/14/19

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>M. Bearden</u>	<u>6/10</u>	<u>0643</u>	<u>24.5</u>	<u>760.1</u>	<u>8.34</u>	<u>8.34</u>	<u>100.0</u>		<u>1.07</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u> </u>	<u>6/10</u>	<u>0645</u>	<u>24.5</u>	<u>760.2</u>	<u>8.34</u>	<u>8.37</u>	<u>100.5</u>			<u>P/F</u>	<u>L/F</u>
CCV	<u> </u>	<u>6/11</u>	<u>0701</u>	<u>22.8</u>	<u>760.7</u>		<u>9.04</u>	<u>105.1</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 mos/cm	Meter Reading μ mos/cm	Pass / Fail	Lab / Field
Calibr.	<u>MB</u>	<u>6/10</u>	<u>0649</u>	<u>2709898</u>	<u>9/19</u>	<u>50000</u>	<u>50000</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u> </u>	<u>6/10</u>	<u>0657</u>	<u>2910103</u>	<u>10/20</u>	<u>5000</u>	<u>4958</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u> </u>	<u>1</u>	<u>1408</u>	<u>2801929</u>	<u>12/19</u>	<u>70000</u>	<u>69368</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>MB</u>	<u>6/10</u>	<u>0651</u>	<u>148510</u>	<u>1/21</u>	<u>7.00</u>	<u>24.3</u>	<u>7.01</u>	<u>5.5</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u> </u>		<u>0652</u>	<u>187188</u>	<u>11/20</u>	<u>4.00</u>	<u>24.3</u>	<u>4.00</u>	<u>14.6</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u> </u>		<u>0654</u>	<u>195490</u>	<u>9/20</u>	<u>10.00</u>	<u>24.3</u>	<u>10.00</u>	<u>181.8</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u> </u>		<u>0656</u>	<u>185490</u>	<u>9/20</u>	<u>10.00</u>	<u>24.3</u>	<u>9.99</u>		<u>P/F</u>	<u>L/F</u>
CCV	<u> </u>		<u>1410</u>	<u>18510</u>	<u>1/21</u>	<u>7.00</u>	<u>24.3</u>	<u>7.10</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 _____, slope from 4 to 7 _____ (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: _____

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>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: