

PALMA SOLA BAY



Site Name: Palma Sola Bay Follow-up Bloom Response **Appendix A**

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

WATERBODY <u>Palma Sola Bay</u>		DATE (M/D/YY): <u>05/20/19</u>	TIME: (AM) <u>1150</u>	Case ID#:
COUNTY: <u>Manatee</u>	LOCATION: <u>Palma Sola Bay</u>		NEAREST TOWN/CITY: <u>Anna Maria</u>	
Visit Type: Initial ☐ Recon ☐ Sampling ☐ Follow- ☒	Samples collected: ☒ yes ☐ no	Samples submitted to: <u>FDEP Lab</u>	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: <u>/</u>		Impounded: ☐ yes ☒ no	Specify	
Lake/Estuary Typical depth <u>3.7</u> m deep	Inflows: ☒ yes ☐ no	Outflows: ☒ yes ☐ no	Stream/River/Canal <u>/</u> m wide Typical Transect <u>/</u> m deep <u>/</u> m deep <u>/</u> m deep Water velocity <u>/</u> m/s <u>/</u> m/s <u>/</u> m/s 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)

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):			Secchi (m)
Top	<u>0.3</u>	<u>28.5</u>	<u>8.16</u>	<u>6.85</u>	<u>52730</u>			
Mid-depth								<u>1.7</u>
Bottom	<u>3.2</u>	<u>27.9</u>	<u>8.15</u>	<u>6.55</u>	<u>52821</u>			

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: ☐ Globbs: ☒ Slick: ☐

Water Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐

Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐

Notes	Abundance:	Absent	Rare	Common	Abundant
	Periphyton	☐	☐	☒	☐
	Fish	☐	☐	☒	☐
	Aquatic Macrophytes	☐	☐	☒	☐
	Iron/sulfur Bacteria	☒	☐	☐	☐

VISIT TEAM:

M. Bearden - FDEP AGENCY:

Contains: 1:1 H2S04
Lot No.: SA8274050
Expires: 10/01/19
See Safety Data Sheet (SDS)

HERNO FISHER SCIENTIFIC
520 NORTH MAIN STREET
1326-695-2711
Contains: 1:1 H2S04
Lot No.: SA8274050
Expires: 10/01/19
See Safety Data Sheet (SDS)

HOLMES BEACH



Site Name: Holmes Beach Follow-up Bloom Response

Appendix A

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

WATERBODY		DATE (M/D/YY):	TIME: (AM)	Case ID#:
Holmes Beach Bayou		05/20/19	1125	
COUNTY:	LOCATION:	NEAREST TOWN/CITY:		
Manatee	Holmes Beach	Anna Maria		

Visit Type:	Samples collected:	Samples submitted to:	Photos Taken:
Initial ☐	☒ yes ☐ no	FDEP Lab	☒ yes ☐ no
Recon ☐	Sample collection method:		
Sampling ☐	Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐		
Follow-up ☐			

Sample & Analysis types:	Aqueous: ☒	Surface Scum: ☐	Benthic mat: ☐	Tissue: ☐
Algal ID & enumeration: ☒	Nutrients: ☒	Chl-a: ☒	AGP: ☐	Turbidity: ☒ Toxin: ☒

Estimated size of bloom:	Impounded: ☐ yes ☐ no	Stream/River/Canal	m wide
Lake/Estuary Typical depth	Inflows: ☒ yes ☐ no	Typical Transect	m deep
Outflows: ☒ yes ☐ no	Water velocity	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/	Latitude	Longitude		
Present Weather conditions	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):			Secchi (m)
Top	0.3	28.0	8.25	7.34	52643			1m 5"
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: ☐ Globbs: ☒ Slick: ☐								
Water Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐								
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐								
Notes					Abundance:			
					Absent	Rare	Common	Abundant
					☐	☐	☒	☐
					☐	☐	☒	☐
					☐	☐	☒	☐
					☒	☐	☐	☐

VISIT TEAM:

M. Bearden - FDEP

AGENCY:

ANNA MARIA ISLAND



Site Name: Anna Maria Island Follow-up Bloom Response

Appendix A

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

Contains: 1:1 H2SO4
Lot No.: SA6274050
Expires: 10/01/19
See Safety Data Sheet (SDS)

THERMAL SCIENTIFIC
SULFURIC ACID -51%
DANGER
Corrosive
7703-18-4
Contains: 1:1 H2SO4
May be corrosive to metals. Causes severe skin burns and eye damage. May cause respiratory irritation. Wash thoroughly after handling. Use only outdoors. Wear appropriate protective clothing. Do not breathe vapors. Do not get on skin or clothes. If swallowed, do not induce vomiting. If inhaled, move to fresh air. If on skin, wash with plenty of water. If in eyes, flush with plenty of water for several minutes. Remove contact lenses, if present, in continuous consultation with a physician. Store in corrosion resistant container with a secure lid.

BODY: Lower		DATE (M/D/YY): 05/20/19	TIME: (AM) 1100	Case ID#:		
Loc: Anna Maria - Tampa Bay						
COUNTY: Manatee County	LOCATION: Anna Maria Island	NEAREST TOWN/CITY: Anna Maria				
Initial Type:	Samples collected:	Samples submitted to:	Photos Taken: ☒ yes ☐ no			
Initial ☐	☒ yes ☐ no					
Recon ☐	Sample collection method:					
Sampling ☐	Single Grab: ☒	Grab Composite: ☐	Depth integrated composite: ☐			
Follow-up ☐						
Sample & Analysis types: Aqueous: ☒ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐						
Algal ID & enumeration: ☒ Nutrients: ☒ Chl-a: ☒ AGP: ☐ Turbidity: ☒ Toxin: ☒						
Estimated size of bloom: Impounded: ☐ yes ☒ no						
Lake/Estuary Typical depth		Stream/River/Canal ☐ m wide				
Inflows: ☒ yes ☐ no		Typical Transect ☐ m deep ☐ m deep ☐ m deep				
Outflows: ☒ yes ☐ no		Water velocity ☐ m/s ☐ m/s ☐ m/s				
3.4 m deep		Left bank Middle Right bank				
Canopy Cover: Open: ☒ Lightly Shaded (11-45%): ☐ Moderately Shaded (46-80%): ☐ Heavily Shaded: ☐						
Description of Bloom/ Latitude Longitude						
Present Weather conditions Degrees Minutes Seconds Degrees Minutes Seconds						
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):	Secchi (m)
Top	0.3	28.2	8.31	7.54	51901	1.1
Mid-depth						
Bottom	2.9	28.0	8.22	7.37	51094	
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: ☐ Globbs: ☒ Slick: ☐						
Water Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐						
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐						
Notes		Abundance: Absent Rare Common Abundant				
		Periphyton ☐ ☐ ☒ ☐				
		Fish ☐ ☐ ☒ ☐				
		Aquatic Macrophytes ☐ ☐ ☒ ☐				
		Iron/sulfur Bacteria ☒ ☐ ☐ ☐				

VISIT TEAM:

M. Bradden - FDEP AGENCY:

Customer: SW-DIST
Project ID: BLOOM-RESP

Requester: Matthew Bearden
Collected By: Kelly Callahan

Field Report Prepared By: Kelly Callahan
Sampling Agency: 8040

Location		ANNA MARIA ISLAND		☐ Comp ☒ Grab		Collection (comp begin or grab)		Date 05/20/2019		Time 1100		Eastern ☒ Central		Composite end		Date		Time		Bottle Group(s)	
				Matrix (type, e.g., Salt, Fresh, etc)		Salt		Diss. Oxygen		7.54		☒ mg/L ☐ % sat		Total Res. Chlorine						A,B,C, D	
W		Site Name: Anna Maria Island Follow-up Bloom Response		Temp (C)		28.2		pH		8.31		Sample Depth		0.3		☒ ft ☐ m		Sp. Conductance (umho/cm)		51901	
Latitude		☐ dd ☐ dms		Salinity (ppt)		-		Comments													
Location		HOLMES BEACH		☒ Comp ☒ Grab		Collection (comp begin or grab)		Date 05/20/2019		Time 1125		Eastern ☒ Central		Composite end		Date		Time		Bottle Group(s)	
				Matrix (type, e.g., Salt, Fresh, etc)		Salt		Diss. Oxygen		7.34		☒ mg/L ☐ % sat		Total Res. Chlorine						A,B,C, D	
W		Site Name: Holmes Beach Follow-up Bloom Response		Temp (C)		28.0		pH		8.25		Sample Depth		0.3		☒ ft ☐ m		Sp. Conductance (umho/cm)		52643	
Latitude		☐ dd ☐ dms		Salinity (ppt)		-		Comments													
Location		PALMA SOLA BAY		☒ Comp ☒ Grab		Collection (comp begin or grab)		Date 05/20/2019		Time 1150		Eastern ☒ Central		Composite end		Date		Time		Bottle Group(s)	
				Matrix (type, e.g., Salt, Fresh, etc)		Salt		Diss. Oxygen		6.85		☒ mg/L ☐ % sat		Total Res. Chlorine						A,B,C, D	
W		Site Name: Palma Sola Bay Follow-up Bloom Response		Temp (C)		28.5		pH		9.10		Sample Depth		0.3		☒ ft ☐ m		Sp. Conductance (umho/cm)		52730	
Latitude		☐ dd ☐ dms		Salinity (ppt)		-		Comments													
Location				☐ Comp ☐ Grab		Collection (comp begin or grab)		Date		Time		Eastern ☐ Central		Composite end		Date		Time		Bottle Group(s)	
Field ID				Matrix (type, e.g., Salt, Fresh, etc)																	
WIN/STORET #				Temp (C)				pH				Sample Depth				☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude		☐ dd ☐ dms		Longitude		☐ dd ☐ dms		Salinity (ppt)				Comments									

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Kelly Callahan	05/20/2019 1400	Fed Ex	1		

Group: A	Bottle Type:	PT-50ML	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>3</u>
BLOOM-ID							
Group: B	Bottle Type:	BG-250ML-WDMT H	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>3</u>
W-MCYST-AA							
Group: C	Bottle Type:	BP-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>3</u>
CHLSUITE-W							
Group: C	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	<u>3</u>
W-NH3							
W-NO2NO3							
W-S-A-TP							
W-TKN							
Group: C	Bottle Type:	P-125ML	# of Bottles: 3	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	<u>3</u>
W-PO4-F							
Group: D	Bottle Type:	BP-1L	# of Bottles: 3	Preservative:	Lugols	Enter Number of Bottles Sent to Lab	<u>3</u>
DTY-QN-C							
PKD-QN-C							

Ref: _____

Dep: _____

DV: _____

Date: 06/11/19

Mgt: 10.00 LBS

SHIPPING: 0.00

SPECIAL: 0.00

HANDLING: 0.00

TOTAL: 0.00

Sys: PRIORITY OVERNIGHT

Master: 4751 8779 3261

TRK: 4751 8779 3261