Station Visit 84099

Cyanobacteria Bloom Response Field Data Sheet (2019-12-16 v4)

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

RQ- 2021-03-15-36		**Collected By:**	Blair/Fitzgerald
Customer:		**Field Report Prepared By:**	Paul Blair
Project ID:	HAB	**Sampling Agency:**	21TLHROC

Location: Lake Munson - East Side

Comments:

Field ID: TLHRHAB0010 ~~TLHHAB0010~~ _LakeMunson1	**Coordinates:** 30.3688 / -84.3028
	Collection Equip: Sample kit
WIN ID: ~~TLHHAB0010~~ TLHRHAB0010	**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)
5-5-22	15:25	14.75	195.7	29.5	9.91	0.3	1.4	1.4	132.1	0.06

Bloom Observations

Algal Bloom Observed?	☑ Yes	☐ No			
Water Surface	☒ Clear	☑ Scum	☐ Globs	☐ Slick	
Water Clarity	☑ Clear	☐ Slightly Turbid	☐ Turbid	☐ Opaque	
Bloom Color	☑ Green	☐ Red	☐ Brown	☐ Other: ____	☐ N/A
Algae Distribution	☐ Suspended in water column		☑ On surface	☐ Other: ____	☐ N/A
Water Odors	☑ Normal	☐ Sewage	☐ Petroleum	☐ Chemical	☐ Other: ____

Parameter Suite	Parameter Methods	Preservation	pH Check	#Bottles Sent to Lab	Bottle Group
Bloom ID (PT-50mL)	☑ BLOOM-ID	☑ Ice	✓	1	B
Chlorophyll (BP-1L)	☑ CHLSUITE-W	☑ Ice		1	A
Toxins (BG-WD250)	☑ W-MCYST-AA	☑ Ice		1	A
Preserved Nutrients (500mL HDPE)	☑ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	☑ Ice ☐ H2SO4	☐ <2		A
	Acid Lot: 1286110	Exp: 12-1-22			
Filtered Nutrients (P125mL)	☑ W-PO4-F ☑ Field Filtered 0.45um Filter, Filter Lot # 17162587	☑ Ice		1	A
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice	Lugols? Y / (N)		

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time

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: 152484 RQ- Project: HAB

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 4/22

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.	T. Fitzgerald	5-5-22	14:32	23.0	756.4	8.55	8.55	99.5	—	1.08	(P) F	(L) / F
ICV	"	"	14:33	23.1	756.4	8.55	8.55	99.8	—	—	(P) F	(L) F
CCV	Paul Blair	"	16:10	32.5	755.4	7.2	7.31	101.1		"	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.	T. Fitzgerald	5-5-22	14:34	210817J	8/22	1000	1000	(P) / F	(L) F
ICV	"	"	14:35	1103B57	3/23	100	96.4	(P) F	(L) / F
CCV	Paul Blair	"	16:11	210817J	8-22	1010	987	(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.	T. Fitzgerald	5-5-22	14:36	201209F	6/22	7.07	22.8	7.01	-25.0	(P) F	(L) F
Calibr.	"	"	14:37	210513B	11/22	4.0	22.8	4.00	148.4	(P) F	(L) / F
Calibr.	"	"	14:38	201209C	6/22	10.04	22.8	10.03	-184.4	(P) / F	(L) F
ICV	"	"	14:39	"	"	10.04	22.8	10.01	-186.2	(P) F	(L) / F
CCV	Paul Blair	"	16:13	210513B	11/22	4.0	23.9	4.09	143.5	(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 10 152.4, slope from 4 to 7 173.4 (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: 4/22
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	T. Fitzgerald	5-5-22	14:41	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:

Request Number: RQ-2021-~~10-04-67~~ME 03-15-36

Algal Bloom Response - TLHROC

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

Project ID: BLOOM-RESP

Requester: Michael Eckles

Collected By: Blair/Fitzgerald

Field Report Prepared By: Paul Blair

Sampling Agency: 8034

Sample 1

Field	Value
WIN ID / Field ID	TLHHAB0010 (corrected: TLHRHAB0010) ec
KIT	Algal Bloom
Location	Lake Munson
Latitude	☐ dd ☐ dms
Longitude	☐ dd ☐ dms
Comp / Grab	☐ Comp ☑ Grab
Collection (comp begin or grab)	Date 5-5-22, Time 15:25, Eastern (circled) / Central
Composite end	Date, Time
Matrix (type, e.g., Salt, Fresh, etc)	Fresh (circled)
Diss. Oxygen	195.7 ☑ mg/L ☐ % sat
Total Res. Chlorine (mg/L)	
Temp (C)	29.5
pH	9.91
Sample Depth	0.3 ☐ ft ☑ m
Sp. Conductance (umho/cm)	132.1
Salinity (ppt)	0.06
Comments	Zip locks full of algae for analysis
Bottle Group(s) (See pg 2)	B/A

Sample 2

Field	Value
Location	
Field ID	
WIN/STORET #	
Latitude	☐ dd ☐ dms
Longitude	☐ dd ☐ dms
Comp / Grab	☐ Comp ☐ Grab
Collection (comp begin or grab)	Date, Time, Eastern / Central
Composite end	Date, Time
Matrix (type, e.g., Salt, Fresh, etc)	
Diss. Oxygen	☐ mg/L ☐ % sat
Total Res. Chlorine (mg/L)	
Temp (C)	
pH	
Sample Depth	☐ ft ☐ m
Sp. Conductance (umho/cm)	
Salinity (ppt)	
Comments	
Bottle Group(s)	

Sample 3

Field	Value
Location	
Field ID	
WIN/STORET #	
Latitude	☐ dd ☐ dms
Longitude	☐ dd ☐ dms
Comp / Grab	☐ Comp ☐ Grab
Collection (comp begin or grab)	Date, Time, Eastern / Central
Composite end	Date, Time
Matrix (type, e.g., Salt, Fresh, etc)	
Diss. Oxygen	☐ mg/L ☐ % sat
Total Res. Chlorine (mg/L)	
Temp (C)	
pH	
Sample Depth	☐ ft ☐ m
Sp. Conductance (umho/cm)	
Salinity (ppt)	
Comments	
Bottle Group(s)	

Sample 4

Field	Value
Location	
Field ID	
WIN/STORET #	
Latitude	☐ dd ☐ dms
Longitude	☐ dd ☐ dms
Comp / Grab	☐ Comp ☐ Grab
Collection (comp begin or grab)	Date, Time, Eastern / Central
Composite end	Date, Time
Matrix (type, e.g., Salt, Fresh, etc)	
Diss. Oxygen	☐ mg/L ☐ % sat
Total Res. Chlorine (mg/L)	
Temp (C)	
pH	
Sample Depth	☐ ft ☐ m
Sp. Conductance (umho/cm)	
Salinity (ppt)	
Comments	
Bottle Group(s)	

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Paul Blair	5-5-22			KK	5.5.22/1617