



Cyanobacteria Bloom Response Field Data Sheet (2019-12-09 v4)

Contains: 1:1 H2SO4
Lot No.: SA9203100
Expires: 07/22/20
See Safety Data Sheet (SDS)

**SULFURIC ACID <51%
DANGER**
152-858-2771
Contains: 1:1 H2SO4
Lot No.: SA9203100
Expires: 07/22/20
See Safety Data Sheet (SDS)

RQ - 2019-12-09-62		Collected By: <i>Matthew Bearden</i>								
Customer: <i>21 FLTPA</i>	Field Report Prepared By: <i>Matthew Bearden</i>									
Project ID: <i>Bloom Resp-SW</i>	Sampling Agency: <i>SW ROC</i>									
Location: <i>Tiger Lake - NW LOBE</i>		Comments: <i>Bloom observed throughout lake, heaviest concentration on western portion.</i>								
WIN/Field ID: HAB-SW-0005		Coordinates: <i>27.90274009, -81.37335751</i>								
Site Name: <i>Tiger Lake - NW Lobe</i>		Collection Equip: <i>Bottles</i>								
Matrix: <i>Fresh</i>		Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A								
Grab										
Water Quality										
Date	Time ☒ EST ☐ CEN	D.O. (mg/L)	D.O. (%)	Temp (°C)	pH (SU)	Sample Depth (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)	Secchi Disk (m)	Total Depth (m)
<i>12/10/19</i> 1040	<i>1040</i>	<i>13.06</i>	<i>1456</i>	<i>20.7</i>	<i>9.43</i>	<i>0.3</i>	<i>123.7</i>	<i>0.06</i>	<i>0.3</i>	<i>1.3</i>
/	/	/	/	/	/	/	/	/	/	/
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: _____						
Algae Distribution	☒ Suspended in water column	☒ On surface	☐ Other: _____							
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	A				
Chlorophyll (BP-1L)	☒ CHLSUITE-W		☒ Ice		1	B				
Toxins (BG-WD250)	☒ W-MCYST-AA		☒ Ice		1	B				
Preserved Nutrients (500mL HDPE)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP		☒ Ice ☒ H2SO4	☒ <2	1	B				
	Lot	<i>9203100</i>	Exp:	<i>7/22/20</i>	☐ <2					
Filtered Nutrients (P125mL)	☒ W-PO4-F		☒ Field Filtered 0.45µm Filter	☒ Ice	1	B				
Quantitative Algae	☒ DTY-QN-C / PKD-QN-C		☒ Ice ☐ Lugols		1	C				
Relinquished By:	Date/Time	Number of Coolers Shipped		Received By:	Date/Time					
<i>M. Bearden</i>	<i>12/10/19</i> <i>1600</i>	1								

Ref:
Dep:

Date: 18Nov19
Wgt: 10.00 LBS
DV:

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00

By: PRIORITY OVERNIGHT
TAPV 1278 ANNO 3675

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: LE19

RQ:

Project: BLOOM RESP.

- 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 11/12/19

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.	M. Bearden	12/10	0649	21.9	763.5	8.8	8.81	100.5		1.01	P / F	L / F
ICV	✓	✓	0653	21.8	763.5	8.8	8.82	100.4			P / F	L / F
CCV	K. Panzer	1	1315	24.2	762.6	8.4	8.53	101.6			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.	MB	12/10	0655	2909939	8/21	1000	1000	P / F	L / F
ICV	✓	✓	0707	2908947	3/21	100	101.8	P / F	L / F
CCV		1	1320	2908947	07/21	100	98.2	P / F	L / F
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.	MB	12/10	0657	193150	5/21	7.01	22.5	7.01	-15.4	P / F	L / F
Calibr.	✓	✓	0700	193247	5/21	4.00	22.6	4.00	166.3	P / F	L / F
Calibr.	✓	✓	0702	192995	5/21	10.03	22.6	10.03	-187.5	P / F	L / F
ICV	✓	✓	0705	193150	5/21	7.01	22.7	6.90	—	P / F	L / F
CCV		✓	1323	192995	5/21	10.00	23.2	10.08	—	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 10 174.1, slope from 4 to 7 179.7 (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: 11/12/19

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						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: