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: Stitch RQ- 2019-08-05-44 Project: Algae 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 10/19

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.	Brian Davis	12/9/19	1225	24.2	758.7	8.4	/	99.8	/	1.02	P / F	L / F
ICV			1227	24.3	758.6	8.4	8.36	99.9	/	1.02	(P) F	(L) F
CCV	AKalmbacher	12-9-19	1910	24.0	757.7	8.4	8.39	99.6		1.02	(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.	Brian Davis	12/9/19	1233	19018	10/20	1000	1000	(P) F	(L) F
ICV			1235	1910258	11/20	20,000	19596	(P) F	(L) F
CCV	AKalmbacher	12-9-19	1413	191018	10/2020	1.000	1.001	(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.	Brian Davis	12/9/19	1240	2902778	1/20	7.01	23.7	7.01	-10.8	P / F	L / F
Calibr.			1242	2907D62	7/21	4.0	23.5	4.0	168.3	P / F	L / F
Calibr.			1245	2904E91	10/20	10.02	23.5	10.02	-184.9	P / F	L / F
ICV			1249	2902778	1/20	7.06	23.8	7.01	-12.0	(P) F	(L) F
CCV	AKalmbacher	12-9-19	1415	2904E91	10/2020	10.0	23.5	10.04	186.8	(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 _____, 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	Brian Davis	12/9/19	1251	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:

Form effective August 1, 2018

Cyanobacteria Bloom Response Field Data Sheet

RQ-2019- 08-05-44		**Collected By:**	BD, KM, AK
Customer	WQAP	**Field Report Prepared By:**	Kelly McDonald
Project ID:	BLOOM_RESP	**Sampling Agency:**	FDEP

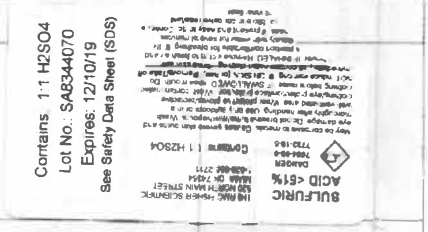
Field ID:

WIN/Fie ID: ~~HAB HOLLY GROVE~~ JP

St Johns R. @ Holly Grove Ave

Comments:

win: NEHAB0102



Collection Equipment:	Ortho #3		
Matrix	Surface water (Grab)	**Coordinates:**	30.21 N, -81.6237
Tide: ☐ Rising ☑ Falling ☐ Slack ☐ N/A		**High Tide Time:**	921 **Low Tide Time:** 353 pm

Water Quality

Date	Time ☒ EST ☐ CEN	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPTh)	Secchi Disk (m)	Total Depth (m)
12/9/19	13:~~38~~ 25 KM	9.39	99.1	17.5	7.73	0.3	2578	1.34	.8	1.0

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	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 SA8344070	Exp: 12/10/19	☐ <2		
Filtered Nutrients (P125mL)	☒ W-PO4-F ☒ Field Filtered 0.45um Filter	☒ Ice		1	B
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

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

last revised Jan 25, 2018

Request Number: RQ-2019-08-05-44

Algae Bloom Response-as needed

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WQAP

Project ID: BLOOM-RESP

Requester: Jeremy M. Parrish

Field Report Prepared By: K. McDonald

Collected By: B.Davis, A. Kalmbacher, K. McDonald

Sampling Agency: DEAR NED

Location: WIN/Fie ID: HAB HOLLY GROVE — St Johns R. @ Holly Grove Ave	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 12/9/19 Time 1325	(Eastern) Central	Composite end Date Time	Bottle Group(s) (See pg 2) A & B
Field ID	Matrix (type, e.g., Salt, Fresh, etc) fresh	Diss. Oxygen 9.39	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #	Temp (C) 17.5	pH 7.73	Sample Depth 0.3 ☐ ft ☒ m	Sp. Conductance (umho/cm) 2578	
Latitude 30.2174 ☒ dd ☐ dms	Longitude -81.6237 ☒ dd ☐ dms	Salinity (ppt) 1.34	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)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude ☐ 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)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude ☐ 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)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
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 A. McDonald	12/9/19 16:00	FedEx	1		

Group: A	Bottle Type: BLOOM-ID	PT-50ML	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-MCYST-AA	BG-250ML-WDMTH	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN	P-500ML	# of Bottles: 8	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 8	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1