

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:

ProDSS Stitch

RQ:

2020-04-20-15

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 6/18/2020

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.	K. McDonald	7/6/20	0923	25.6	762.1	8.2	8.16	100.3	-	1.051	P/F	F
ICV	↓	↓	0925	25.9	762.1	8.2	8.15	100.4	-	1.051	P/F	F
CCV	↓	↓	1426	25.0	762.6	8.3	8.51	102.9	-	1.051	P/F	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.	K. McDonald	7/6/20	0929	2001070	04/2021	1000	1000	P/F	F
ICV	↓	↓	0930	191025A	11/2020	1412	1411	P/F	F
CCV	↓	↓	1429	190711A	07/2020	100	104.6	P/F	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.	K. McDonald	7/6/20	0933	2001C31	01/2022	7.00	26.4	-34.1	7.00	P/F	F
Calibr.	↓	↓	0938	2001B53	01/2022	4.00	26.4	4.01	148.3	P/F	F
Calibr.	↓	↓	0941	2002911	08/2021	9.99	26.2	9.99	-202.6	P/F	F
ICV	↓	↓	0943	200B53	01/2022	4.00	26.4	4.01	146.6	P/F	F
CCV	↓	↓	1431	2002911	08/2021	9.98	27.0	9.99	-207.0	P/F	F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ; mV pH 4 Range $\pm 180 \pm 50$; 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: 6/18/2020

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	K. McDonald	7/6/20	0944	0.00	0.00	P/F	F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:



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

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

RQ - 2020-04-20-15		Collected By:	K. McDonald, B. Davis	
Customer:	21 FLA	Field Report Prepared By:	K. McDonald	
Project ID:	Algal Response	Sampling Agency:	NEROC	

WIN/Fie ID:

HAB EAGLE TRL

Crescent Lake @ Eagle Trail

Comments: visible green algae

WIN ID:	HAB Eagle TRL NEHAB0006		Coordinates:	29.3847594, -81.4728250	
Matrix:	Fresh	Grab	Collection Equip:	Pro DSS Stich, sample bottle, & pole	
			High Tide Time:		Low Tide Time:
			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)
7/6/20	1140	113.4	8.66	29.4	8.57	0.13	0.26	0.26 VDB	810	0.39

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
	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	☒ Ice ☒ H2SO4	☒ <2	1	B
Preserved Nutrients (500mL HDPE)	Acid Lot: SA9354050	Exp: 12/26/2020			
Filtered Nutrients (P125mL)	☒ W-PO4-F	☒ Field Filtered 0.45µm Filter			
		Filter Lot # R08B26305	☒ Ice	1	B
Quantitative Algae	☒ DTY-QN-C / PKD-QN-C	☒ Ice	Lugols? Y / N	1	C

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
K. McDonald	7/6/2020 11430	1		

SULFURIC ACID <61%
 DANGER
 7584-93-8
 7582-16-6
 Contains: 1.1 H2SO4
 May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. If swallowed: Rinse mouth. Do NOT induce vomiting. If ON SKIN (or hair): Remove/soak off immediately all contaminated clothing. Take skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Flush thoroughly with water for several minutes. Rinsing: Store locked up. Store in corrosion resistant container with a resistant liner.

Contains: 1.1 H2SO4
 Lot No: SA9354050
 Expires: 12/26/2020
 See Safety Data Sheet (SDS)



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

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

RQ - 2020-04-20-15	Collected By:	B. Davis, K. McDonald
Customer: 21FLA	Field Report Prepared By:	K. McDonald
Project ID: Algae Response	Sampling Agency:	FDEP NE ROC

WIN/Fie ID:



HAB BEECHERS PT

St Johns R. @ Beechers Pt

NEHAB0007

WIN ID: HAB BEECHERS PT

Matrix: Fresh

Grab

Comments:

no bloom observed

SULFURIC ACID <61%
DANGER
7084-85-9
7782-18-8
May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. IF ON SKIN (p. 10): Remove take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Flush cautiously with water for several minutes. Holding lids open. Get in ophthalmologist care. Do not use contact lenses with a resident pool tank.

Contains 1.1 H2SO4
Lot No.: SA9354050
Expires: 12/2020
See Safety Data Sheet (SDS)

Coordinates: 29.4679, -81.6845

Collection Equip: Pro BSS stitch, sample bottle, & pole

High Tide Time:

Low Tide Time:

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 (PPT)
7/6/20	1235	112.5	8.52	29.6	8.32	0.3	1.09	0.6	1277	0.63

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
	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	☒ Ice ☒ H2SO4	☒ <2	1	B
Preserved Nutrients (500mL HDPE)	Acid Lot: SA9354050	Exp: 12/20/2020			
Filtered Nutrients (P125mL)	☒ W-PO4-F ☒ Field Filtered 0.45µm Filter	☒ Ice		1	B
	Filter Lot # RO8826305				
Quantitative Algae	☒ DTY-QN-C / PKD-QN-C	☒ Ice	Lugols? Y/N	1	C
Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time	
K. McDonald	7/7/20 7/6/20 1630	1			

Algal Bloom Response- NEROC

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

Requester: Jeremy M. Parrish

Field Report Prepared By: Bruce Davis

Project ID: BLOOM-RESP

Collected By: BV, KMSampling Agency: DEAR NEROC

Location	WIN/Fie ID:  HAB EAGLE TRL	☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>7/6/20</u> Time <u>1140</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2)
Field ID	Crescent Lake @ Eagle Trail	Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>	Diss. Oxygen <u>8.66</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	<u>A, B, C</u>
WIN/ST		Temp (C) <u>29.4</u>	pH <u>8.57</u>	Sample Depth <u>0.13</u>	Sp. Conductance (umho/cm) <u>810</u>	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) <u>0.39</u>	Comments	
Location	WIN/Fie ID:  HAB BEECHERS PT	☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>7/6/20</u> Time <u>1235</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s)
Field ID	St Johns R. @ Beechers Pt	Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>	Diss. Oxygen <u>8.52</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	<u>A, B, C</u>
WIN/ST		Temp (C) <u>29.6</u>	pH <u>8.32</u>	Sample Depth <u>0.3</u>	Sp. Conductance (umho/cm) <u>1277</u>	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) <u>0.63</u>	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: <u>BV, KM</u>	Date/Time: <u>7/6/20 1600</u>	Shipping Method: <u>Fed Ex</u>	Number of Coolers Shipped: <u>1</u>	Received By: _____	Date/Time: _____
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Group: A Bottle Type: PT-50ML # of Bottles: ~~#~~ 2 Preservative: ICE Enter Number of Bottles Sent to Lab 2
BLOOM-ID

Group: B Bottle Type: BG-250ML-WDMT H # of Bottles: ~~#~~ 2 Preservative: ICE Enter Number of Bottles Sent to Lab 2
W-MCYST-AA

Group: B Bottle Type: P-500ML # of Bottles: ~~#~~ 2 Preservative: ICE And H2SO4 Enter Number of Bottles Sent to Lab 2
W-NH3
W-NO2NO3
W-S-A-TP
W-TKN

Group: C Bottle Type: BP-1L # of Bottles: ~~#~~ 2 Preservative: Lugols Enter Number of Bottles Sent to Lab 2
DTY-QN-C
PKD-QN-BV

Group: B Bottle Type: BP-1L # of Bottles: 2 Preservative: Ice Bottles Sent 2
CHLSUITE-W

Group: B Bottle Type: P-125ML # of Bottles: 2 Preservative: Filter-Ice Bottles sent 2
W-PO4-F