

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: PLO DSS RQ- 2019-06-17-12 Project: Nassau North

- 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 _____

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	6/20/19	8:22	23.1	756.3	8.5	8.52	99.5	/	/	(P) F	(L) F
ICV			8:23	23.1	756.2	8.5	8.52	99.6	/	/	(P) F	(L) F
CCV	Kalmbacher		15:47	26.3	755.6	8.1	8.15	100.9	—	—	(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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Brian Davis	6/20/19	8:28	190430A	5/20	1000	995	(P) F	(L) F
ICV			8:29	190319B	3/20	100	102.7	(P) F	(L) F
CCV	Kalmbacher		15:50	0124820	6/2020	24.820	24.957	(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.	Brian Davis	6/20/19	8:35	2904C54	3/21	7.0	24.5	7.01	-58.4	(P) F	(L) F
Calibr.			8:36	2904800	3/21	4.0	24.5	4.0	119.7	(P) F	(L) F
Calibr.			8:37	2901B51	7/20	10.	24.4	10.01	-232.1	(P) F	(L) F
ICV			8:39	2904C54	3/21	7.0	24.6	7.03	-58.3	(P) F	(L) F
CCV	Kalmbacher		15:55	2901B51	7/2020	10.0	24.6	10.01	-233.5	(P) F	(L) F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 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	B-D	6/20/19	8:40	0.00	0.00	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:

Effective Date: 08/04/2014
Revision Date: 08/04/2014
Author: E. Miller
AB-17-1.7

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY <i>Goodbys Creek @ SR13</i>		DATE (M/D/YY): <i>6/20/19</i>	TIME: (AM) <i>1520</i>	Case ID#
COUNTY: <i>Duval</i>	LOCATION: <i>Goodbys CR @ SR13</i>		NEAREST TOWN/CITY: <i>Jacksonville</i>	
Visit Type: Initial ☒ Recon ☐ Sampling ☐ Follow-up ☐	Samples collected: ☒ yes ☐ no	Samples submitted to:		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:		Impounded: ☐ yes ☒ no		
Lake/Estuary Typical depth: m deep		Stream/River/Canal: <i>70</i> m wide		
Inflows: ☐ yes ☐ no		Typical Transect: <i>1.0</i> m deep m deep m deep		
Outflows: ☐ yes ☐ no		Water velocity: <i>.1</i> m/s 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: Degrees Minutes Seconds Longitude: Degrees Minutes Seconds
Present Weather conditions: <i>Mostly Cloudy, humid.</i> <i>30.21559</i> <i>-81.21559</i>
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map) Last rain event: <i>6/20/19</i>
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):	Secch(m)
Top	<i>0.3</i>	<i>27.9</i>	<i>6.25</i>	<i>6.25</i>	<i>4742</i>	<i>0.8</i>
Mid-depth						
Bottom	<i>1.0 m</i>					
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: ☐ Glob: ☐ Slick: ☐						
Water Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐						
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐						
Notes: <i>No bloom observed, rain today</i> <i>DO: 81.9</i>						
Abundance: Absent Rare Common Abundant						
Periphyton ☒ ☐ ☐ ☐						
Fish ☐ ☐ ☒ ☐						
Aquatic Macrophytes ☐ ☒ ☐ ☐						
Iron/sulfur Bacteria ☒ ☐ ☐ ☐						

VISIT TEAM:

B. Davis
A. Kalmbacher
C. Ruben

AGENCY:

FDEP DEAR NE ROC

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: WQAP

Requester: Jeremy M. Parrish

Field Report Prepared By: C. Ruben

Project ID: BLOOM-RESP

Collected By: C Ruben/A Kalmbacher/B Davis Sampling Agency: FDEP DEAR NE R&C

Location <u>Goodbys Creek at SR 13</u>		☐ Comp ☒ Grab		Collection (comp begin or grab) Date <u>6/20/19</u> Time <u>1520</u>		☒ Eastern ☐ Central		Composite end Date <u>—</u> Time <u>—</u>		Bottle Group(s) (See pg 2)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc) <u>Salt</u>		Diss. Oxygen <u>6.25</u>		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L) <u>—</u>		<u>A, B</u>	
WIN/STORET #		Temp (C) <u>27.9</u>		pH <u>7.31</u>		Sample Depth <u>0.3</u>		☐ ft ☒ m		Sp. Conductance (umho/cm) <u>4742</u> <u>C, D</u>	
Latitude <u>30.21559</u>		☒ dd ☐ dms		Longitude <u>-81.616250</u>		☒ dd ☐ dms		Salinity (ppt) <u>2.52</u>		Comments <u>DO % = 81.9%</u>	
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date <u>—</u> Time <u>—</u>		☐ Eastern ☐ Central		Composite end Date <u>—</u> Time <u>—</u>		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 <u>—</u> Time <u>—</u>		☐ Eastern ☐ Central		Composite end Date <u>—</u> Time <u>—</u>		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 <u>—</u> Time <u>—</u>		☐ Eastern ☐ Central		Composite end Date <u>—</u> Time <u>—</u>		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 <u>—</u> Time <u>—</u>		☐ Eastern ☐ Central		Composite end Date <u>—</u> Time <u>—</u>		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>[Signature]</u>	Date/Time <u>6/20/19 1545</u>	Shipping Method <u>Fedex</u>	Number of Coolers Shipped: <u>1</u>	Received By:	Date/Time
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Group: A	Bottle Type:	PT-50ML	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
BLOOM-ID							
Group: B	Bottle Type:	BG-250ML-WDMT H	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
W-MCYST-AA							
Group: C	Bottle Type:	BP-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W							
Group: C	Bottle Type:	P-500ML	# of Bottles: 8	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
W-NH3							
W-NO2NO3							
W-S-A-TP							
W-TKN							
Group: C	Bottle Type:	P-125ML	# of Bottles: 8	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
W-PO4-F							
Group: D	Bottle Type:	BP-1L	# of Bottles: 8	Preservative:	Lugols	Enter Number of Bottles Sent to Lab	1
DTY-QN-C							
PKD-QN-BV							