

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: APC D851

RQ: na

Project: STARS WT

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 6/2019

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.	J Parrish	7/30/19	722	23.3	761.5	8.5	8.5	101.2	—	—	P/F	L/F
ICV	J	7/30/19	724	23.3	761.5	8.54	8.54	100.2	—	—	P/F	L/F
CCV	J Parrish	7/30/19	1612	25.0	761.2	8.3	8.35	101	—	—	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.	J Parrish	7/30/19	725	1904304	5/20	1000	1000	P/F	L/F
ICV	J	7/30/19	727	1903193	3/20	100	101	P/F	L/F
CCV	J Parrish	7/30/19	1615	7141319	12/19	1413	1403	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.	J Parrish	7/30/19	730	2904054	3/21	7.	24.6	7.01	20.3	P/F	L/F
Calibr.	J	7/30/19	731	2904800	3/21	4.	24.7	4.01	161.	P/F	L/F
Calibr.	J	7/30/19	732	2901301	7/20	10.	24.6	10.01	192	P/F	L/F
ICV	J	7/30/19	733	2904600	3/21	4.0	24.8	4.01	158.7	P/F	L/F
CCV	J Parrish	7/30/19	1617	2901851	5/20	10.	24.6	9.92	188.3	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 _____, 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	J					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:

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY NAME: St. Johns River		DATE (M/D/YY): 7/30/14	TIME: (AM) (PM) 1500	Case ID#: RA-2014-08-05-44
COUNTY: St. Johns	LOCATION: St. Johns River @ 959 Bayside		NEAREST TOWN/CITY: Switzerland	
Visit Type: ☒ Initial ☐ Recon ☒ Sampling ☐ Follow-up	Samples collected: ☒ yes ☐ no Sample collection method: Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐	Samples submitted to: DEP Photos Taken: ☒ yes ☐ no		
Sample & Analysis types: Aqueous: ☐ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐ Algal ID & enumeration: ☒ Nutrients: ☒ Chl-a: ☒ AGP: ☐ Turbidity: ☐ Toxin: ☒ <u>Specify</u>				
Estimated size of bloom: Lake/Estuary Typical depth: ☐ m deep Inflows: ☐ yes ☐ no Outflows: ☐ yes ☐ no		Impounded: ☐ yes ☐ no Stream/River/Canal: ☐ m wide Typical Transport: ☐ m deep Water velocity: ☐ m/s Left bank: ☐ Middle: ☐ Right bank: ☐		

Canopy Cover:	Open: ☒	Lightly Shaded (11-45%): ☐	Moderately Shaded (46-80%): ☐	Heavily Shaded: ☐
Description of Bloom:	Latitude: 30.0881475 Degrees Minutes Seconds		Longitude: 81.645077 Degrees Minutes Seconds	
Present Weather conditions Sunny 90s				
Last rain event				
Rainfall amount				
Print a map from GIS tool or internet mapping service (e.g., Mapquest, Google Map)				
Sketch bloom area on the attached map. Indicate wind direction.				

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	SAL (ppt)	DO (%)	Secchi (m)
Top	0.3	31.1	8.09	9.21	1034	0.50	124.1	1.0
Mid-depth								
Bottom	1.16							
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: ☐ Globbs: ☐ Slick: ☐								
Water Clarity (check box): Clear: ☐ Slightly: ☒ Turbid: ☐ Opaque: ☐								
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐								
Abundance:					Absent	Rare	Common	Abundant
Periphyton					☐	☒	☐	☐
Fish					☐	☒	☐	☐
Aquatic Macrophytes					☐	☒	☐	☐
Iron/sulfur Bacteria					☐	☒	☐	☐

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Did not observe algae bloom. Took samples for verification.

K. Appleby
J. Parrish

AGENCY:

FDEP NE ROL

Algae Bloom Response-as needed

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

Requester: Jeremy M. Parrish

Field Report Prepared By:

Jeremy Parrish

Project ID: BLOOM-RESP

Collected By:

Jeremy Parrish

Sampling Agency:

FDEP NEERC

Location St. Johns River @ 959 Bayside Bluff		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 7/30/19 Time 1500		Eastern Central	Composite end Date Time	Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 9.2	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	A, B
WIN/STORET #		Temp (C) 31.1	pH 8.09	Sample Depth 0.3	☐ ft ☒ m	Sp. Conductance (umho/cm) 1034	
Latitude 30.0881475	☐ dd ☐ dms	Longitude 81.645077	☐ dd ☐ dms	Salinity (ppt) 0.50	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)
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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: Jerry Parrish	Date/Time 7/30/19 1600	Shipping Method Fedex	Number of Coolers Shipped: 1	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:	BP-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W							
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: B	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: B	Bottle Type:	P-125ML	# of Bottles: 8	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
W-PO4-F							
Group: C	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
OV-MBAS-W							