

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:

DEPLORABLE

RQ:

2019-08-05-37

Project:

Algae Lake

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 06/18/19

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.	Nicole Reistad	07/30/19	0721	26.3	761.4	8.1	8.10	100.2		1.074	(P) F	(L) F
ICV			0723	26.1	761.4	8.1	8.14	100.5			(P) F	(L) F
CCV			1610	26.5	760.6	8.1	8.08	100.4			(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.	Nicole Reistad	07/30/19	0727	2904E34	04/21	1000	1000	(P) F	(L) F
ICV			0731	28100A1	10/20	500	495	(P) F	(L) F
CCV			1607	2904D82	04/21	100	97	(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.	Nicole Reistad	07/30/19	0736	191304	03/21	7.6994	25.8	7.00	-4.9	(P) F	(L) F
Calibr.			0740	191303	03/21	4.011	26.0	4.01	167.6	(P) F	(L) F
Calibr.			0743	191040	03/21	10.003	25.8	9.99	-184.20	(P) F	(L) F
ICV			0745	191040	03/21	10.003	25.6	10.00		(P) F	(L) F
CCV			1613	191304	03/21	6.997	24.7	7.00		(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 10 179.1, slope from 4 to 7 172.5 (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: 3312A; Date of last verification: 06/18/19

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:

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY NAME: Lake Okarchobee		DATE (M/D/Y): 7/30/14	TIME: (AM) (PM) 1115	Case ID#: NW-073019
LOCATION: NW Lake O		COUNTY: Okarchobee	NEAREST TOWN/CITY: Okarchobee	
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	Stream/River/Canal: ☐ m wide	
Lake/Estuary Typical depth: ☐ m deep		Inflows: ☐ yes ☐ no	Typical Transect: ☐ m deep ☐ m deep ☐ m deep	
Outflows: ☐ yes ☐ no		Water velocity: ☐ 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

Last rain event

Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)

Rainfall amount

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):	DPH	SHI	Secchi (m)
Top	0.3	30.56	9.04	8.31	422.9	110.9	0.19	0.6
Mid-depth								
Bottom	1.4							
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order) 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: ☐ Opaque: ☐								
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐								
Notes: Contains: 1:1 H2604 Lot No.: SA8344070 Expires: 12/10/19 See Safety Data Sheet (SDS)					Abundance: Periphyton ☐ Absent ☐ Rare ☐ Common ☐ Abundant ☐ Fish ☐ Aquatic Macrophytes ☐ Iron/sulfur Bacteria ☐			

VISIT TEAM:

AGENCY:

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY NAME: <i>Lake Okeechobee</i>		DATE (M/D/Y): <i>07/30/19</i>	TIME: (AM) (PM): <i>1230</i>	Case ID#: <i>N-073019</i>
LOCATION: <i>N. Lake O</i>		COUNTY: <i>Okeechobee</i>	NEAREST TOWN/CITY: <i>Okeechobee</i>	
Visit Type: Initial ☐ Recon ☐ Sampling ☐ Follow-up ☐	Samples collected: ☒ yes ☐ no	Samples submitted to: <i>7 DEP - Tallahassee</i>		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	Stream/River/Canal m wide	
Lake/Estuary Typical depth m deep		Inflows: ☐ yes ☐ no	Typical Transect m deep	
Outflows: ☐ yes ☐ no		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 Degrees Minutes Seconds		Longitude Degrees Minutes Seconds	
Present Weather conditions				
Last rain event				
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.				
Rainfall amount				

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	DO%	Sal. (ppt)	Secchi (m)
Top	<i>0.3</i>	<i>31.849</i>	<i>8.88</i>	<i>7.89</i>	<i>360</i>	<i>107.9</i>	<i>0.17</i>	<i>0.4</i>
Mid-depth	<i>1.6</i>	<i>31.506</i>	<i>8.63</i>	<i>6.33</i>	<i>358</i>	<i>85.9</i>	<i>0.17</i>	
Bottom	<i>2.1</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: ☐	Globs: ☐	Slick: ☐			
Water Clarity (check box):		Clear: ☐	Slightly: ☐	Turbid: ☐	Opaque: ☐			
Bloom Color (check box):		Green: ☐	Red: ☐	Brown: ☐	Other: ☐			
Notes Contains: 1:1 H2SO4 Lot No.: SA8344070 Expires: 12/10/19 See Safety Data Sheet (SDS)		Abundance:		Absent	Rare	Common	Abundant	
		Periphyton		☐	☐	☐	☐	
		Fish		☐	☐	☐	☐	
		Aquatic Macrophytes		☐	☐	☐	☐	
		Iron/sulfur Bacteria		☐	☐	☐	☐	

VISIT TEAM:

AGENCY:

SULFURIC ACID <51%
 Contains: 1:1 H2SO4
 Lot No.: SA8344070
 Expires: 12/10/19
 See Safety Data Sheet (SDS)

May be used to neutralize, clean, or remove acid from surfaces and equipment. Use only outdoors or in a well-ventilated area. Do not mix with other chemicals. Avoid contact with skin and eyes. If contact occurs, flush with water for at least 15 minutes. If inhaled, move to fresh air. If swallowed, do not induce vomiting. Seek medical attention. This product is highly corrosive and can cause severe burns. It is also a strong oxidizer and can cause fires. It is also a strong irritant and can cause respiratory distress. It is also a strong irritant and can cause skin irritation. It is also a strong irritant and can cause eye irritation. It is also a strong irritant and can cause throat irritation. It is also a strong irritant and can cause breathing apparatus irritation. It is also a strong irritant and can cause clothing irritation. It is also a strong irritant and can cause footwear irritation. It is also a strong irritant and can cause jewelry irritation. It is also a strong irritant and can cause hair irritation. It is also a strong irritant and can cause nail irritation. It is also a strong irritant and can cause teeth irritation. It is also a strong irritant and can cause mucous membranes irritation. It is also a strong irritant and can cause reproductive system irritation. It is also a strong irritant and can cause immune system irritation. It is also a strong irritant and can cause nervous system irritation. It is also a strong irritant and can cause circulatory system irritation. It is also a strong irritant and can cause respiratory system irritation. It is also a strong irritant and can cause digestive system irritation. It is also a strong irritant and can cause excretory system irritation. It is also a strong irritant and can cause reproductive system irritation. It is also a strong irritant and can cause immune system irritation. It is also a strong irritant and can cause nervous system irritation. It is also a strong irritant and can cause circulatory system irritation. It is also a strong irritant and can cause respiratory system irritation. It is also a strong irritant and can cause digestive system irritation. It is also a strong irritant and can cause excretory system irritation.

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY NAME: Lake Okeechobee		DATE (M/D/YY): 07/30/19	TIME (AM) (PM): 1150	Case ID#: NE_073019
LOCATION: NE Lake O		COUNTY: Okeechobee	NEAREST TOWN/CITY: Okeechobee	
Visit Type: Initial ☐ Recon ☐ Sampling ☐ Follow-up ☐	Samples collected: ☒ yes ☐ no	Samples submitted to: 7 DEP - Tallahassee		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	Stream/River/Canal: ☐ m wide	
Lake/Estuary Typical depth: ☐ m deep		Inflows: ☐ yes ☐ no	Typical Transect: ☐ m deep ☐ m deep ☐ m deep	
Outflows: ☐ yes ☐ no		Water velocity: ☐ 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	Longitude		
Present Weather conditions	Degrees Minutes Seconds	Degrees Minutes Seconds		
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)				Last rain event
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):	Sal. ppt	DO%	Secchi (m)
Top	0.3	30.16	8.14	6.24	415.1	0.20	82.9	0.4
Mid-depth		30.06	8.04	5.80	414.9	0.20	77.0	
Bottom	3.0	30.06	8.04					
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order) NR 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: ☐	Globs: ☐	Slick: ☐			
Water Clarity (check box):		Clear: ☐	Slightly: ☐	Turbid: ☐	Opaque: ☐			
Bloom Color (check box):		Green: ☐	Red: ☐	Brown: ☐	Other: ☐			
Notes					Abundance: Periphyton ☐ Absent ☐ Rare ☐ Common ☐ Abundant ☐ Fish ☐ Aquatic Macrophytes ☐ Iron/sulfur Bacteria ☐			

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