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: Shark RQ- 2020-06-08-16 Project: Gainesville

-AND- RQ-2020-04-20-15 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.	JPam	6/24/20	710	25.8	761	8.1	8.1	100.1		1.027	P / F	L / F
ICV	"	"	711	25.8	761	8.1	8.14	100.6	—	1.027	P / F	L / F
CCV	K.McDonald	6/24	1526	26.2	760.6	8.1	8.19	101.3		1.027	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.	JPam	6/24/20	717	2004076	4/21	1000	1000	P / F	L / F
ICV	"	"	717	190711A	7/20	100	112.8	P / F	L / F
CCV	K.McDonald	6/24	1530	2004076	04/21	1000	1000	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.	JPam	6/24/20	714	2911816	10/21	7.	26.6	7.00	-36.6	P / F	L / F
Calibr.	"	"	715	2001853	1/22	4.	27.3	4.01	146.7	P / F	L / F
Calibr.	"	"	716	2002911	8/21	10.	27.3	9.97	204.2	P / F	L / F
ICV	"	"	717	2001853	1/22	4.	27.2	3.98	146.4	P / F	L / F
CCV	K.McDonald	6/24	1532	2002911	08/21	10.	27.8	9.99	-208.6	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: 6/18/20
If **NO**, what will be used? (circle one) **Secchi Disk Line / Sonar** Unique ID: _____; Date of last verification: ~~6/18~~ km

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	JPam	6/24/20	721	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

km

RQ ~~2019~~ 2020-04-20-15		Collected By:	J. Parrish, K. McDonald
Customer	km & WQAP	Field Report Prepared By:	K. McDonald
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

Field ID: Lochloosa Lake @ Lochloosa Park

WIN=NEHAB0003

Comments: water column muddy green v. turbid 29.51667, -82.116667

Collection Equipment: sample bottle

Matrix: Fresh (Grab)

Coordinates: 29° 31' N, -82° 7' W

Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A

High Tide Time: — Low Tide Time: —

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)
6/24/2020	1010	8.54	113.8	30.4 km 7	8.99	0.3	103.1	0.05	0.25	1.8
	1012	7.57	100.2	30.1	8.45	1.3	101.2	0.05		

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: _____
Algae Distribution	☐ Suspended in water column		☐ On surface	☐ Other: _____
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 SA9301030 Exp: 10/28/20		☐ <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~~ km		1	C

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
K. McDonald km	6/24/20	1		

SULFURIC ACID <51% — DANGER — Contains: 1:1 H2SO4

THERMO FISHER SCIENTIFIC, 500 NORTH MAIN STREET, MIAMI, OK 74354, 1-918-658-2711

Lot No.: SA9301030 Expires: 10/28/20

See Safety Data Sheet (SDS)

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fume/mist/vapours. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear chemical-resistant 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/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: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Store in corrosive resistant container with a resistant inner liner.

LIMs QC'd: BD 1/25/2021

Request Number: RQ-2020-04-20-15

Algal Bloom Response- NEROC

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

Project ID: BLOOM-RESP

Requester: Jeremy M. Parrish

Collected By: J. Parrish + K. McDonald

Field Report Prepared By: K. McDonald

Sampling Agency: FDEP NEROC

Location: Lochloosa Lake near Lochloosa park	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 6/24/20 Time 1010	(Eastern) Central	Composite end Date — Time —	Bottle Group(s) (See pg 2): A, B, & C
Field ID:	Matrix (type, e.g., Salt, Fresh, etc): Fresh		Diss. Oxygen 8.54 ~~113 8~~ KM ☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L): —	
WIN/STORET #:	Temp (C): 30.4	pH: 8.99	Sample Depth: 0.3 ☐ ft ☒ m	Sp. Conductance (umho/cm): 103.1	
Latitude: 29° 31' N ☐ dd ☒ dms	Longitude: -82° 7' W ☐ dd ☒ dms	Salinity (ppt): 0.05	Comments: turbid water, no bloom observed		

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
K McDonald	6/24/20 1630	FedEx	1		

Group: A	Bottle Type: PT-50ML BLOOM-ID	# of Bottles: 4	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	1
Group: B	Bottle Type: BG-250ML-WDMTH W-MCYST-AA	# of Bottles: 4	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	1
Group: B	Bottle Type: P-500ML W-NH3 W-NO2NO3 W-S-A-TP W-TKN	# of Bottles: 4	Preservative:	ICE And H2SO4	**Enter Number of Bottles Sent to Lab**	1
Group: C	Bottle Type: BP-1L DTY-QN-C PKD-QN-BV	# of Bottles: 4	Preservative:	Lugols	**Enter Number of Bottles Sent to Lab**	1

km

Group B ~~Bottle type~~ CHLSUITE-W 1 ice no: 1

1L m.

Group B W-PO4-F 1 ice no: 1