

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: Bruce

RQ: 2021-09-27-47

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 8/16/21

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. Lee	9/30/21	0801	21.2	763.2	8.9	8.9	100.4	-	1.02	P/F	L/F
ICV			0802	21.2	763.3	8.9	8.90	100.2	-	1.02	P/F	L/F
CCV	Brian Davis		1530	25.1	762.5	8.2	8.35	100.9	/	1.02	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. Lee	9/30/21	0757	210420B	05/22	1000	1000	P/F	L/F
ICV			0759	210426A	05/22	100	101.3	P/F	L/F
CCV	Brian Davis		1648	210917C	9/22	50,000	49519	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. Lee	9/30/21	0805	2107F56	07/23	7.02	21.4	7.02	-31.8	P/F	L/F
Calibr.			0807	2107G40	07/23	4.00	21.2	4.00	148.6	P/F	L/F
Calibr.			0809	2107A04	12/22	10.04	21.1	10.04	-202.9	P/F	L/F
ICV			0811	2107F56	07/23	7.02	21.3	7.05	-30.5	P/F	L/F
CCV			1649	2107A04	12/22	10.03	21.8	10.09	-202.4	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 10 171, slope from 4 to 7 180.4 (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: 8/16/21

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. Lee	9/30/21	0812	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:

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By: Brian D Katherine H								
Customer	WQMP	Field Report Prepared By: Brian D.								
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
WIN ID/Field ID:  NEHAB0049		Comments:								
LSJR @ Little marsh Island		Collection Equipment:	Outho #1							
Matrix:	Menisc	(Grab)	Coordinates: 30.3932, -81.4933							
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 (PPT)	Secchi Disk (m)	Total Depth (m)
9/30/20	1205	6.36	85.2	21.3	7.85	0.3	16474	6.37	1.2	11.7
	1208	5.38	76.4	21.8	7.89	8.0	31697	19.68		
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 SA 1105060		Exp: 4/30/20		☐ <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						
Relinquished By:	Date/Time	Number of Coolers Shipped			Received By:	Date/Time				

LIMS QC: BD 10/21/2021

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By: Brian D. / Katherine H.								
Customer: Wamp	Field Report Prepared By: Katherine Halbert									
Project ID: BLOOM_RESP	Sampling Agency: FDEP									
Field ID:		Comments:								
WIN ID/Field ID:  NEHAB0051 LSJR @ North Ferry Ramp		Collection Equipment: Ortho #3								
Matrix: Marine	Grab	Coordinates: 30.3957, 81.4361								
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 (PPT)	Secchi Disk (m)	Total Depth (m)
09/30/2021	11:00	7.39	98.7	28.1	7.88	0.15	13475	7.73	VOB	0.3 KH
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: SA1105060	Exp: 04/30/2022		☐ <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							
Relinquished By:	Date/Time	Number of Coolers Shipped		Received By:		Date/Time				
	09/30/2021 16:00	2								

LIMs QC: BD 10/21/2021

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By: Brian D. / Katherine H.								
Customer: WQMP	Field Report Prepared By: Katherine Halbert									
Project ID: BLOOM_RESP	Sampling Agency: FDEP									
Field ID: WIN ID/Field ID:  NEHAB0052 LSJR @ Dame Point Bridge		Comments:								
Matrix: Marine		Collection Equipment: Ortho #3								
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A		Coordinates: 30.867, -81.5580								
		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)
9/30/21	12:40	6.55	86.2	27.7	7.81	0.445	11093	6.70	0.8	8.3
	12:45	5.36 KH	75.3	27.6	7.87	7.380	29357	18.06		
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	Exp:			☐ <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					
Relinquished By:	Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
	09/30/2021 16:00		2							

LIMs QC: BD 10/21/2021

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-27-47		Collected By: Jamsh J Lee	
Customer: 21 FLA		Field Report Prepared By: Jamsh	
Project ID: BLOOM_RESP		Sampling Agency: FDEP	
Field ID:		Comments: Streaks of algae	

WIN ID/Field ID: 

NEHAB0054

Willow Branch @ Park

Contains: Conc. H2SO4
Lot No.: S41105060
Expires: 04/30/22
See Safety Data Sheet (SDS)

Matrix: SW	☒ Grab	Collection Equipment: Pole	Coordinates: 30° 30' 43" N 81° 42' 56" W
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A	High Tide Time: 535 AM	Low Tide Time: 1135	

Date	Time ☐ EST ☐ CEN	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPT)	Secchi Disk (m)	Total Depth (m)
9/30/21	920	4.9	59.3	25.0	7.20	0.3	431	0.21	0.5 VOB	0.5

Algal Bloom Observed? ☒ Yes ☐ No		
Water Surface ☐ Clear ☒ Scum ☐ Globbs ☐ 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: 591105060	Exp: 4/30/22	☒ <2		BW
Filtered Nutrients (P125mL)	☒ W-PO4-F ☒ Field Filtered 0.45um Filter	☒ Ice		1	B
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

Relinquished By: Jam	Date/Time: 9/30/21	Number of Coolers Shipped: 1	Received By:	Date/Time:
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