

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- 2022-03-14-55

2021-12-06-30

Project: Orange Lake McIntosh

Algae Response

2/3/22

- 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 2/3/22

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.	<u>K. Villinger</u>	<u>3/8/22</u>	<u>749</u>	<u>21.2</u>	<u>762.5</u>	<u>8.9</u>	<u>—</u>	<u>100.3</u>	<u>—</u>	<u>1.0296</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
ICV	<u>↓</u>	<u>↓</u>	<u>751</u>	<u>21.1</u>	<u>762.5</u>	<u>8.9</u>	<u>8.92</u>	<u>100.3</u>	<u>—</u>	<u>1.0296</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
CCV	<u>↓</u>	<u>↓</u>	<u>1635</u>	<u>21.4</u>	<u>759.2</u>	<u>8.8</u>	<u>8.83</u>	<u>99.9</u>	<u>—</u>	<u>1.0286</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> 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.	<u>K. Villinger</u>	<u>3/8/22</u>	<u>753</u>	<u>210917B</u>	<u>9/22</u>	<u>1000</u>	<u>1000</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
ICV	<u>↓</u>	<u>↓</u>	<u>756</u>	<u>210426A</u>	<u>5/22</u>	<u>100</u>	<u>102.2</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
CCV	<u>↓</u>	<u>↓</u>	<u>1636</u>	<u>211122B</u>	<u>12/22</u>	<u>1413</u>	<u>1412</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> 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.	<u>K. Villinger</u>	<u>3/8/22</u>	<u>758</u>	<u>2112B19</u>	<u>12/23</u>	<u>7.01</u>	<u>21.5</u>	<u>7.01</u>	<u>-15.1</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
Calibr.	<u>↓</u>	<u>↓</u>	<u>801</u>	<u>2201088</u>	<u>1/24</u>	<u>4.00</u>	<u>21.6</u>	<u>4.00</u>	<u>-14.2</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
Calibr.	<u>↓</u>	<u>↓</u>	<u>804</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.03</u>	<u>21.6</u>	<u>10.03</u>	<u>-185.4</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
ICV	<u>↓</u>	<u>↓</u>	<u>807</u>	<u>2112B19</u>	<u>12/23</u>	<u>7.01</u>	<u>21.5</u>	<u>7.01</u>	<u>-14.0</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
CCV	<u>↓</u>	<u>↓</u>	<u>1638</u>	<u>2201088</u>	<u>1/24</u>	<u>4.00</u>	<u>21.4</u>	<u>4.03</u>	<u>159.5</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> F
CCV	<u>↓</u>	<u>↓</u>	<u>1640</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.03</u>	<u>21.5</u>	<u>10.01</u>	<u>-185.1</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> 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 10 170.3, slope from 4 to 7 176.3 (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: 2/3/22

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	<u>K. Villinger</u>	<u>3/8/22</u>	<u>805</u>	<u>0.000</u>	<u>0.000</u>	<u>Ⓟ</u> F	<u>Ⓛ</u> 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-2022-03-14-55

RQ-2021 12-06-36 (KW)	Collected By: K. Villinger, B. Davis
Customer: WQAP	Field Report Prepared By: Katrin Villinger
Project ID: BLOOM_RESP	Sampling Agency: FDEP

WIN ID/Field ID:



NEHAB0065

Orange lake-McIntosh Bay

Comments:

Bloom suspended in highly populated hydrilla Mats.

Matrix: Fresh	Grab	Collection Equipment: Pole, ortho #3, Bruce (Meter ID)
Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A	Coordinates: 29.4360, -82.1919	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)
3/8/22	1245	9.78 (KW) 109.4	9.78	22.8	9.36	0.3	87.6	0.04	0.6	2.68
1235		3.9 (KW) 38	3.9	15.7	5.90	2.18	104.6	0.05		

Bloom Observations

Algal Bloom Observed?	☒ Yes	☐ No
Water Surface	☒ Clear	☐ Scum
Water Clarity	☐ Clear	☐ Slightly Turbid
Bloom Color	☒ Green	☐ Red
Algae Distribution	☒ Suspended in water column	☐ On surface
Water Odors	☒ Normal	☐ Sewage

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
Filtered Nutrients (P125mL)	☒ W-PO4-F	☐ Field Filtered 0.45um Filter ☐ Ice	☒ <2	1	B
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			
Relinquished By: Katrin Villinger	Date/Time: 3/8/22 1630	Number of Coolers Shipped: 1	Received By:	Date/Time:	

Cyanobacteria Bloom Response Field Data Sheet

RQ-2022-03-14-55

RQ-2022-03-14-55	Collected By: K. Villinger, B. Davis
Customer: WQAP	Field Report Prepared By: Katrin Villinger
Project ID: BLOOM_RESP	Sampling Agency: FDEP

Field ID:

WIN ID/Field ID:



NEHAB0067

Mcintosh Bay South of small Islands

Comments: Bloom suspended in highly populated Hydrilla mats.

Matrix: Fresh	Grab	Collection Equipment: Pole, Ortho #3, Bruce (Meter ID)
Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A	Coordinates: 29.4424, -82.1915	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)
3/8/22	1315	8.25	95.4	23.0	8.30	0.3	85.6	0.04	0.75	2503
	1313	1.9	0.19	17.6	6.29	2.003	93.5	0.04		

Bloom Observations

Algal Bloom Observed?	☒ Yes	☐ No
Water Surface	☒ Clear	☐ Scum
Water Clarity	☒ Clear	☐ Slightly Turbid
Bloom Color	☒ Green	☐ Red
Algae Distribution	☒ Suspended in water column	☐ On surface
Water Odors	☒ Normal	☐ Sewage

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
Filtered Nutrients (P125mL)	☒ W-PO4-F	☒ Field Filtered 0.45um Filter ☒ Ice	☒ <2	1	B
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			
Relinquished By: Katrin Villinger	Date/Time: 3/8/22 1630	Number of Coolers Shipped: 1	Received By:	Date/Time:	

Cyanobacteria Bloom Response Field Data Sheet

RQ-03-14-55

~~RQ-2021-12-06-30~~ ^{KA}

Customer	WQAP	Collected By:	K. Villingers B. Davis
Project ID:	BLOOM_RESP	Field Report Prepared By:	Katrin Villingers
		Sampling Agency:	FDEP

WIN ID/Field ID:



NEHAB0068

Mcintosh Bay West of Bird Island

Comments: Bloom suspended in highly populated hydrilla mats.

Matrix:	Fresh	Collection Equipment:	Pole, Bruce (Meter ID), or 40 #3
		Coordinates:	29.4350, -82.2028
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)
3/8/22	1335	9.24	109.6	24.4	8.34	0.3	82.1	0.04	1.6	2.235
	1333	1.15	12.3	18.1	6.40	1.735	88.1	0.04		

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: 4/30/22	☒ <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	
Katrin Villingers	3/8/22 1630	1			