

From: [Davis, Brian G.](#)
To: [Reaves, Shawn D](#); [Appleby, Kimberly](#)
Subject: RE: 2022-04-11-48
Date: Monday, May 9, 2022 7:47:15 AM
Attachments: [RQ-2022-04-11-48_05042022.pdf](#)

Whoops, it was a long day. Here are the corrections.

From: Reaves, Shawn D <Shawn.Reaves@FloridaDEP.gov>
Sent: Friday, May 6, 2022 7:29 AM
To: Appleby, Kimberly <Kimberly.Appleby@FloridaDEP.gov>; Davis, Brian G. <Brian.G.Davis@FloridaDEP.gov>
Subject: 2022-04-11-48
Importance: High

Good Morning,

Can you verify the time zone for site below. Also can a modified submittal form be sent.

Thank s

RQ - 2022-04-11-48		Collected By:	Kim Appleby, Brian Davis							
Customer:		Field Report Prepared By:	Kimberly Appleby							
Project ID:	BLOOM_RESP	Sampling Agency:	NEROC							
Location: Orange Lake HAB Center		Comments: Weather: Sunnny. Algae seen evenly distributed on water surface and in water column.								
Field ID: NEHAB0075		Coordinates:	29.46560, -82.17754							
WIN Secondary Resource Type: Lake		Collection Equip:	WaterBottle							
WIN ID: NEHAB0075		High Tide Time:		Low Tide Time:						
Matrix:	Fresh	Grab	Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A							
Water Quality										
Date	Time ☐ EST ☒ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)
05/04/2022	12:10	92.8	7.48	26.4	7.07	0.3	3.1	0.8	83.9	0.04
	12:27	72.7	5.93	25.5	6.88	2			83.7	0.04
	12:28	66.6	5.46	25.5	6.81	2.6			83.8	0.04
Bloom Observations										

Shawn D. Reaves
DEP-Lab Support
Environmental Specialist I
Office: 850-245-8082
Direct: 58082
Email: Shawn.Reaves@FloridaDEP.gov

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: B-400

RQ: 2022-04-11-48

Project: Algae Response

Oocyte, Venter, Newlands

- 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 5/3/22

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.	Brian Davis	5/4/22	814	21.2	762.6	8.9	8.9	100.3	✓	1.02	P/F	L/F
ICV	↓	↓	815	21.1	762.6	8.9	8.92	100.3	✓	1.02	P/F	L/F
CCV	Kim Appleby	↓	1703	22.9	760.2	8.6	8.63	100.4	✓	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.	Brian Davis	5/4/22	758	220225A	3/23	1000	1000	P/F	L/F
ICV	↓	↓	759	210917A	9/22	100	100.7	P/F	L/F
CCV	Kim Appleby	↓	1705	211122B	12/22	1413	1422	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.	Brian Davis	5/4/22	803	2112B19	12/23	7.02	21.3	7.02	-16.1	P/F	L/F
Calibr.	↓	↓	806	2201088	1/24	4.00	21.3	4.00	164.1	P/F	L/F
Calibr.	↓	↓	808	2202A63	7/23	10.04	21.4	10.04	-183.2	P/F	L/F
ICV	↓	↓	810	2112B19	12/23	7.02	21.3	7.05	-13.2	P/F	L/F
CCV	Kim Appleby	↓	1708	2201D88	1/24	4.00	21.9	4.00	161.9	P/F	L/F
CCV	↓	↓	1710	2202A63	7/23	10.03	21.9	10.03	-185.3	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 10 167.1, slope from 4 to 7 180.2 (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: 5/2/22

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	Brian Davis	5/4/22	817	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 (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48				Collected By:		Kimberly Appleby, Brian Davis					
Customer:		WQAP		Field Report Prepared By:		Kim Appleby					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Orange lake-McIntosh Bay				Comments: Weather: Sunny. Specks of algae seen distributed on surface and with in water column.							
Field ID: NEHAB0065				Coordinates:		29.43618, -82.19034					
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle					
WIN ID: NEHAB0065				High Tide Time:		Low Tide Time:					
Matrix:		Fresh		Grab		Tide:		☐ Rising ☐ Falling ☐ Slack ☒ N/A			
Water Quality											
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)	
05/04/2022	11:40	123.8	9.91	26.6	9.51	0.3	2.82	1	84.2	0.04	
	11:50	12.5	1.04	2.06	6.47	2			90.4	0.04	
	11:53	3.5	0.31	21	6.18	2.32			97.4	0.04	
Bloom Observations											
Algal Bloom Observed? ☒ Yes ☐ No											
Water Clarity		☒ Clear ☐ Slightly Turbid ☐ Turbid ☐ Opaque									
Bloom Color		☒ Green ☐ Red ☐ Brown ☐ Other:									
Algae Type		☒ Planktonic ☐ Filamentous ☐ Other:									
Algae Accumulation		☐ Mat ☒ Specks ☐ Scum ☐ Glob									
Algae Distribution		☒ Surface-Entire ☐ Surf-Localized ☐ Surf-Windblown ☒ Suspended ☐ Benthic ☐ Epiphytic									
Parameter Suite	Parameter Methods					Preservation		pH Check	#Bottles Sent to Lab	Bottle Group	
Algae ID (PT-50mL)	☐ ALGAE-ID					☐ Ice					
Bloom ID (PT-50mL)	☒ BLOOM-ID					☒ Ice			1	A	
Chlorophyll (BP-1L)	☒ CHLSUITE-W					☒ Ice			1	B	
Toxins (BG-WD250)	☒ W-MCYST-AA / W-SAXTN-MS					☒ Ice			1	B	
Preserved Nutrients (500mL HDPE)	☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP					☐ Ice	☐ H2SO4	☐ <2			
	Acid Lot:					Exp:					
Filtered Nutrients (P125mL)	☒ W-PO4-F		☐ Field Filtered 0.45um Filter			☒ Ice			1	B	
			Filter Lot #								
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C					☐ Ice	☐ Lugols				
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time		
Kim Appleby		05/04/2022 16:00		1							



Cyanobacteria Bloom Response Field Data Sheet (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48				Collected By:		Brian Davis, Kim Appleby					
Customer:		WQAP		Field Report Prepared By:		Brian Davis					
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC					
Location: Lake Wauberg				Comments: Very pea green water.							
Field ID: NEHAB0072				Coordinates:		29.53032, -82.30233					
WIN Secondary Resource Type: Lake				Collection Equip:		WaterBottle					
WIN ID: NEHAB0072				High Tide Time:				Low Tide Time:			
Matrix:		Fresh		Grab		Tide:		☐ Rising ☐ Falling ☐ Slack ☒ N/A			
Water Quality											
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)	
05/04/2022	15:05	209.4	16.29	27.8	10.32	0.3	4.5	0.5	125.5	0.06	
	15:12	30.4	2.92	25.9	6.88	2			82.4	0.04	
	15:14	4.9	0.38	25.4	6.62	4			85.3	0.04	
Bloom Observations											
Algal Bloom Observed? ☒ Yes ☐ No											
Water Clarity		☐ Clear		☐ Slightly Turbid		☒ Turbid		☐ Opaque			
Bloom Color		☒ Green		☐ Red		☐ Brown		☐ Other:			
Algae Type		☒ Planktonic		☐ Filamentous		☐ Other:					
Algae Accumulation		☐ Mat		☐ Specks		☐ Scum		☐ Glob			
Algae Distribution		☐ Surface-Entire		☐ Surf-Localized		☐ Surf-Windblown		☒ Suspended		☐ Benthic ☐ Epiphytic	
Parameter Suite	Parameter Methods					Preservation		pH Check	#Bottles Sent to Lab	Bottle Group	
Algae ID (PT-50mL)	☐ ALGAE-ID					☐ Ice					
Bloom ID (PT-50mL)	☒ BLOOM-ID					☒ Ice			1	A	
Chlorophyll (BP-1L)	☒ CHLSUITE-W					☒ Ice			1	B	
Toxins (BG-WD250)	☒ W-MCYST-AA / W-SAXTN-MS					☒ Ice			1	B	
Preserved Nutrients (500mL HDPE)	☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP					☐ Ice	☐ H2SO4	☐ <2			
	Acid Lot:					Exp:					
Filtered Nutrients (P125mL)	☒ W-PO4-F		☒ Field Filtered 0.45um Filter			☒ Ice			1	B	
			Filter Lot #								
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C					☐ Ice	☐ Lugols				
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time		
Brian Davis		05/04/2022 16:00		1							



Cyanobacteria Bloom Response Field Data Sheet (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48				Collected By:		Brian Davis, Kim Appleby				
Customer:		WQAP		Field Report Prepared By:		Brian Davis				
Project ID:		BLOOM_RESP		Sampling Agency:		NEROC				
Location: 183rd ave Canal off Cross Creek				Comments: Very low oxygen. Very little flow.						
Field ID: NEHAB0076				Coordinates:		29.48501, -82.16323				
WIN Secondary Resource Type: Canal				Collection Equip:		WaterBottle				
WIN ID: NEHAB0076				High Tide Time:		Low Tide Time:				
Matrix:		Fresh		Grab		Tide:		☐ Rising ☐ Falling ☐ Slack ☒ N/A		
Water Quality										
Date	Time ■ EST □ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)
05/04/2022	12:55	22.1	1.8	25	6.33	0.3	0.6	0.6	128.1	0.06
Bloom Observations										
Algal Bloom Observed? ☒ Yes ☐ No										
Water Clarity		☐ Clear		☒ Slightly Turbid		☐ Turbid		☐ Opaque		
Bloom Color		☒ Green		☐ Red		☐ Brown		☐ Other:		
Algae Type		☒ Planktonic		☐ Filamentous		☐ Other:				
Algae Accumulation		☐ Mat		☒ Specks		☒ Scum		☐ Glob		
Algae Distribution		☒ Surface-Entire		☐ Surf-Localized		☐ Surf-Windblown		☒ Suspended		☐ Benthic ☐ Epiphytic
Parameter Suite	Parameter Methods					Preservation		pH Check	#Bottles Sent to Lab	Bottle Group
Algae ID (PT-50mL)	☒ ALGAE-ID					☒ Ice			1	A
Bloom ID (PT-50mL)	☒ BLOOM-ID					☒ Ice			1	B
Chlorophyll (BP-1L)	☒ CHLSUITE-W					☒ Ice			1	B
Toxins (BG-WD250)	☒ W-MCYST-AA / W-SAXTN-MS					☒ Ice			1	B
Preserved Nutrients (500mL HDPE)	☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP					☐ Ice	☐ H2SO4	☐ <2		
	Acid Lot:					Exp:				
Filtered Nutrients (P125mL)	☒ W-PO4-F		☒ Field Filtered 0.45um Filter			☒ Ice			1	B
			Filter Lot #							
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C					☐ Ice	☐ Lugols			
Relinquished By:		Date/Time		Number of Coolers Shipped			Received By:		Date/Time	
Brian Davis		05/04/2022 13:04		1						



Cyanobacteria Bloom Response Field Data Sheet (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48		Collected By:		Kim Appleby, Brian Davis							
Customer:		Field Report Prepared By:		Kimberly Appleby							
Project ID:	BLOOM_RESP	Sampling Agency:		NEROC							
Location: Orange Lake HAB Center			Comments: Weather: Sunnny. Algae seen evenly distributed on water surface and in water column.								
Field ID: NEHAB0075			Coordinates: 29.46560, -82.17754								
WIN Secondary Resource Type: Lake			Collection Equip: WaterBottle								
WIN ID: NEHAB0075			High Tide Time:		Low Tide Time:						
Matrix:	Fresh	Grab	Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A								
Water Quality											
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)	
05/04/2022	12:10	92.8	7.48	26.4	7.07	0.3	3.1	0.8	83.9	0.04	
	12:27	72.7	5.93	25.5	6.88	2			83.7	0.04	
	12:28	66.6	5.46	25.5	6.81	2.6			83.8	0.04	
Bloom Observations											
Algal Bloom Observed? ☒ Yes ☐ No											
Water Clarity		☒ Clear		☐ Slightly Turbid		☐ Turbid		☐ Opaque			
Bloom Color		☒ Green		☐ Red		☐ Brown		☐ Other:			
Algae Type		☒ Planktonic		☐ Filamentous		☐ Other:					
Algae Accumulation		☐ Mat		☒ Specks		☐ Scum		☐ Glob			
Algae Distribution		☒ Surface-Entire		☐ Surf-Localized		☐ Surf-Windblown		☒ Suspended		☐ Benthic ☐ Epiphytic	
Parameter Suite		Parameter Methods				Preservation		pH Check	#Bottles Sent to Lab	Bottle Group	
Algae ID (PT-50mL)		☐ ALGAE-ID				☐ Ice					
Bloom ID (PT-50mL)		☒ BLOOM-ID				☒ Ice			1	A	
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	B	
Toxins (BG-WD250)		☒ W-MCYST-AA / W-SAXTN-MS				☒ Ice			1	B	
Preserved Nutrients (500mL HDPE)		☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☐ Ice	☐ H2SO4	☐ <2			
		Acid Lot:		Exp:							
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B	
				Filter Lot #							
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice	☐ Lugols				
Relinquished By:		Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
Brian Davis		05/04/2022 16:00		1							

RQ-2022-04-11-48

Login Checklist

Login Station ID: #2

Shipping Method: FedEx | UPS | HD | Greyhound

Date/Time of Receipt: 5/5/2022 9:20

*Cooler Temperature	Samples Frozen?	* All Samples in Cooler Preserved with		Number of Sample Containers in Cooler	Evidence Tape				Waybill Tracking #	
		YES	HNO ₃		Formalin	Present?		*Intact?		
						Yes	No	Yes		No
3.3				16		✓			522555463004	

COOLER CHECK

*All samples received on ice unless otherwise noted. HNO₃ and Formalin preserved samples do NOT have a temperature requirement.

- If the temperature of a cooler exceeds 6.0 oC (above 10.0 oC for W-1-4-DIOX and microbiology) or received without ice, identify affected samples in an NCR. NCR# _____
- DOH coolers can exceed 2.0 °C above the standard temperature (6.0 or 10.0 °C for W-1-4-DIOX) without login confirmation from customer for samples requiring ice preservation; identify affected samples in an NCR. NCR# _____
- If cooler or samples are received with a damaged Evidence Seal; identify the affected samples in an NCR. NCR# _____
- If coolers or samples are received late; identify the affected samples in an NCR. NCR# _____

Chain of Custody/ Field Sheet(s) Included?

Yes ☒ No ☐

Micro-Biology Overflow Chain of Custody/ Field Sheet(s) Included?

Yes ☐ No ☒

CONTAINER CHECK

Evidence Tape on Bottles?

Yes ☐ No ☐ NA ☒Evidence Tape intact? Yes ☐ No ☐

If Criminal, photographs taken?

Yes ☐ No ☐Containers intact? Yes ☒ No ☐

Caps on tight?

Yes ☒ No ☐

Sufficient Sample Volume:

Yes ☒ No ☐If **NO** is checked above, generate an NCR listing affected sample IDs in its appropriate category. NCR# _____

CHLORINE CHECK REQUIRED? (Blue dot on container)

Yes ☐ No ☒ Init: IM

Chlorine detected? (One container checked per Field ID)

Yes ☐ No ☐ Init: _____

If chlorine is detected, generate an NCR listing affected sample IDs . NCR# _____

PRESERVATION CHECK (EXCLUDING SAMPLES SENT TO OVERFLOW LABS, "OV-")

**Acid Preserved Samples: pH < 2.0?

Yes ☒ No ☐ NA ☐ Init: IM

**W-1-4-DIOX (Green dot on container) preserved to pH < 4.0?

Yes ☐ No ☐ NA ☒ Init: IM

If samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

Coolers Unpacked/Checked by: IM

Date: 5/5/2022

Event contains NCRs (Y/N)? ☒

Event ID:

Algal Bloom Response- NEROC
 WQAP-2022-05-05-01 (BLOOM-RESP)
 Date Received: 05-MAY-2022 09:20

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Additional Comments:

Infrared Thermometer ID:	IR TEMP GUN #2 exp:10/19/22
pH Test Strips 0 – 6	
pH Paper 0 – 3	
pH Paper 0 – 13	207621 exp: 3/15/24
Chlorine Test Strips	0070 exp: 02/2023

ENCORE SAMPLES

S-VOC-MS samples in Encores must be frozen within 48 hours of collection.

Were Encores samples received? Yes _____ Init: _____

Date and time placed in freezer _____

Were all samples placed in freezer within 48 hours of collection? Yes _____ No _____

If no, were samples shipped on dry ice? Yes _____ No _____

If S-VOC-MS samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

FOR CLEAN LAB USE ONLY – Total Mercury Preservation Check(W-HG-AF;W-HG-AF-F):

Samples preserved within 48 hours? Yes _____ No _____

Date and time samples preserved: _____

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: B-4ce

RQ: 2022-04-11-48

Project: Algae Response

Oocyte, Neutrophilic Neutrophils

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

5/3/22

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>Brian Davis</u>	<u>5/4/22</u>	<u>814</u>	<u>21.2</u>	<u>762.6</u>	<u>8.9</u>	<u>8.9</u>	<u>100.3</u>	<u>✓</u>	<u>1.02</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>↓</u>	<u>↓</u>	<u>815</u>	<u>21.1</u>	<u>762.6</u>	<u>8.9</u>	<u>8.92</u>	<u>100.3</u>	<u>✓</u>	<u>1.02</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>Kim Appleby</u>	<u>↓</u>	<u>1703</u>	<u>22.9</u>	<u>760.2</u>	<u>8.6</u>	<u>8.63</u>	<u>100.4</u>	<u>✓</u>	<u>1.02</u>	<u>P/F</u>	<u>L/F</u>
CCV											<u>P/F</u>	<u>L/F</u>

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>Brian Davis</u>	<u>5/4/22</u>	<u>758</u>	<u>220225A</u>	<u>3/23</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>↓</u>	<u>↓</u>	<u>759</u>	<u>210917A</u>	<u>9/22</u>	<u>100</u>	<u>100.7</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>Kim Appleby</u>	<u>↓</u>	<u>1705</u>	<u>211122B</u>	<u>12/22</u>	<u>1413</u>	<u>1422</u>	<u>P/F</u>	<u>L/F</u>
CCV								<u>P/F</u>	<u>L/F</u>

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>Brian Davis</u>	<u>5/4/22</u>	<u>803</u>	<u>2112B19</u>	<u>12/23</u>	<u>7.02</u>	<u>21.3</u>	<u>7.02</u>	<u>-76.1</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>↓</u>	<u>↓</u>	<u>806</u>	<u>2201088</u>	<u>1/24</u>	<u>4.00</u>	<u>21.3</u>	<u>4.00</u>	<u>164.1</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>↓</u>	<u>↓</u>	<u>808</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.04</u>	<u>21.4</u>	<u>10.04</u>	<u>-183.2</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>↓</u>	<u>↓</u>	<u>810</u>	<u>2112B19</u>	<u>12/23</u>	<u>7.02</u>	<u>21.3</u>	<u>7.05</u>	<u>-13.2</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>Kim Appleby</u>	<u>↓</u>	<u>1708</u>	<u>2201D88</u>	<u>1/24</u>	<u>4.00</u>	<u>21.9</u>	<u>4.00</u>	<u>161.9</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>↓</u>	<u>↓</u>	<u>1710</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.03</u>	<u>21.9</u>	<u>10.03</u>	<u>-185.3</u>	<u>P/F</u>	<u>L/F</u>

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 10 162.1, slope from 4 to 7 180.2 (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: 5/2/22

If NO, what will be used? 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>Brian Davis</u>	<u>5/4/22</u>	<u>817</u>	<u>0.00</u>	<u>0.00</u>	<u>P/F</u>	<u>L/F</u>

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 (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48		Collected By:		Kimberly Appleby, Brian Davis	
Customer:	WQAP	Field Report Prepared By:		Kim Appleby	
Project ID:	BLOOM_RESP	Sampling Agency:		NEROC	
Location: Orange lake-McIntosh Bay			Comments: Weather: Sunny. Specks of algae seen distributed on surface and with in water column.		
Field ID: NEHAB0065			Coordinates: 29.43618, -82.19034		
WIN Secondary Resource Type: Lake			Collection Equip: WaterBottle		
WIN ID: NEHAB0065			High Tide Time:		Low Tide Time:
Matrix:	Fresh	Grab	Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A		

Water Quality										
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT _h)
05/04/2022	11:40	123.8	9.91	26.6	9.51	0.3	2.82	1	84.2	0.04
	11:50	12.5	1.04	2.06	6.47	2			90.4	0.04
	11:53	3.5	0.31	21	6.18	2.32			97.4	0.04

Bloom Observations	
Algal Bloom Observed?	☒ Yes ☐ No
Water Clarity	☒ Clear ☐ Slightly Turbid ☐ Turbid ☐ Opaque ☐ Bloom Color ☒ Green ☐ Red ☐ Brown ☐ Other: ☐ Algae Type ☒ Planktonic ☐ Filamentous ☐ Other: ☐ Algae Accumulation ☐ Mat ☒ Specks ☐ Scum ☐ Glob ☐ Algae Distribution ☒ Surface-Entire ☐ Surf-Localized ☐ Surf-Windblown ☒ Suspended ☐ Benthic ☐ Epiphytic

Parameter Suite	Parameter Methods	Preservation	pH Check	#Bottles Sent to Lab	Bottle Group
Algae ID (PT-50mL)	☐ ALGAE-ID	☐ Ice			
Bloom ID (PT-50mL)	☒ BLOOM-ID	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	B
Toxins (BG-WD250)	☒ W-MCYST-AA / W-SAXTN-MS	☒ Ice		1	B
Preserved Nutrients (500mL HDPE)	☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	☐ Ice ☐ H2SO4	☐ <2		
	Acid Lot: Exp:				
Filtered Nutrients (P125mL)	☒ W-PO4-F ☐ Field Filtered 0.45µm Filter Filter Lot #	☒ 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
Kim Appleby	05/04/2022 16:00	1	IM	5/5/22 9:20



Cyanobacteria Bloom Response Field Data Sheet (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48		Collected By:		Brian Davis, Kim Appleby						
Customer:	WQAP	Field Report Prepared By:		Brian Davis						
Project ID:	BLOOM_RESP	Sampling Agency:		NEROC						
Location: 183rd ave Canal off Cross Creek			Comments: Very low oxygen. Very little flow.							
Field ID: NEHAB0076			Coordinates: 29.48501, -82.16323							
WIN Secondary Resource Type: Canal			Collection Equip: WaterBottle							
WIN ID: NEHAB0076			High Tide Time:		Low Tide Time:					
Matrix:	Fresh	Grab	Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A							
Water Quality										
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPT)
05/04/2022	12:55	22.1	1.8	25	6.33	0.3	0.6	0.6	128.1	0.06
Bloom Observations										
Algal Bloom Observed? ☒ Yes ☐ No										
Water Clarity	☐ Clear	☒ Slightly Turbid	☐ Turbid	☐ Opaque						
Bloom Color	☒ Green	☐ Red	☐ Brown	☐ Other:						
Algae Type	☒ Planktonic	☐ Filamentous	☐ Other:							
Algae Accumulation	☐ Mat	☒ Specks	☒ Scum	☐ Glob						
Algae Distribution	☒ Surface-Entire	☐ Surf-Localized	☐ Surf-Windblown	☒ Suspended	☐ Benthic	☐ Epiphytic				
Parameter Suite	Parameter Methods		Preservation		pH Check	#Bottles Sent to Lab	Bottle Group			
Algae ID (PT-50mL)	☒ ALGAE-ID		☒ Ice			1	A			
Bloom ID (PT-50mL)	☒ BLOOM-ID		☒ Ice			1	B			
Chlorophyll (BP-1L)	☒ CHLSUITE-W		☒ Ice			1	B			
Toxins (BG-WD250)	☒ W-MCYST-AA / W-SAXTN-MS		☒ Ice			1	B			
Preserved Nutrients (500mL HDPE)	☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP		☐ Ice	☐ H2SO4	☐ <2					
	Acid Lot:	Exp:								
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				
Brian Davis	05/04/2022 13:04	1		IM		5/5/22 9:20				



Cyanobacteria Bloom Response Field Data Sheet (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48		Collected By:		Brian Davis, Kim Appleby	
Customer:	WQAP	Field Report Prepared By:		Brian Davis	
Project ID:	BLOOM_RESP	Sampling Agency:		NEROC	
Location: Lake Wauberg			Comments: Very pea green water.		
Field ID: NEHAB0072			Coordinates: 29.53032, -82.30233		
WIN Secondary Resource Type: Lake			Collection Equip: WaterBottle		
WIN ID: NEHAB0072			High Tide Time:		Low Tide Time:
Matrix:	Fresh	Grab	Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A		

Water Quality										
Date	Time ☒ EST ☐ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPTH)
05/04/2022	15:05	209.4	16.29	27.8	10.32	0.3	4.5	0.5	125.5	0.06
	15:12	30.4	2.92	25.9	6.88	2			82.4	0.04
	15:14	4.9	0.38	25.4	6.62	4			85.3	0.04

Bloom Observations	
Algal Bloom Observed?	☒ Yes ☐ No
Water Clarity	☐ Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque
Bloom Color	☒ Green ☐ Red ☐ Brown ☐ Other:
Algae Type	☒ Planktonic ☐ Filamentous ☐ Other:
Algae Accumulation	☐ Mat ☐ Specks ☐ Scum ☐ Glob
Algae Distribution	☐ Surface-Entire ☐ Surf-Localized ☐ Surf-Windblown ☒ Suspended ☐ Benthic ☐ Epiphytic

Parameter Suite	Parameter Methods	Preservation	pH Check	#Bottles Sent to Lab	Bottle Group
Algae ID (PT-50mL)	☐ ALGAE-ID	☐ Ice			
Bloom ID (PT-50mL)	☒ BLOOM-ID	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	B
Toxins (BG-WD250)	☒ W-MCYST-AA / W-SAXTN-MS	☒ Ice		1	B
	☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	☐ Ice ☐ H2SO4 ☐ <2			
Preserved Nutrients (500mL HDPE)	Acid Lot: Exp:				
Filtered Nutrients (P125mL)	☒ W-PO4-F ☒ Field Filtered 0.45um Filter	☒ Ice		1	B
	Filter Lot #				
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
Brian Davis	05/04/2022 16:00	1	IM	5/5/22 9:20



Cyanobacteria Bloom Response Field Data Sheet (2022-04-15 v1)

Email scanned submittal forms to lab.receiving@FloridaDEP.gov

RQ - 2022-04-11-48		Collected By:		Kim Appleby, Brian Davis							
Customer:		Field Report Prepared By:		Kimberly Appleby							
Project ID: BLOOM_RESP		Sampling Agency:		NEROC							
Location: Orange Lake HAB Center			Comments: Weather: Sunny. Algae seen evenly distributed on water surface and in water column.								
Field ID: NEHAB0075			Coordinates: 29.46560, -82.17754								
WIN Secondary Resource Type: Lake			Collection Equip: WaterBottle								
WIN ID: NEHAB0075			High Tide Time:		Low Tide Time:						
Matrix: Fresh		Grab		Tide: ☐ Rising ☐ Falling ☐ Slack ☒ N/A							
Water Quality											
Date	Time ☐ EST ☒ CEN	D.O. (%)	D.O. (mg/L)	Temp (°C)	pH (SU)	Sample Depth (m)	Total Depth (m)	Secchi Disk (m)	Sp. Cond. (µmho/cm)	Salinity (PPTth)	
05/04/2022	12:10	92.8	7.48	26.4	7.07	0.3	3.1	0.8	83.9	0.04	
	12:27	72.7	5.93	25.5	6.88	2			83.7	0.04	
	12:28	66.6	5.46	25.5	6.81	2.6			83.8	0.04	
Bloom Observations											
Algal Bloom Observed? ☒ Yes ☐ No											
Water Clarity		☒ Clear		☐ Slightly Turbid		☐ Turbid		☐ Opaque			
Bloom Color		☒ Green		☐ Red		☐ Brown		☐ Other:			
Algae Type		☒ Planktonic		☐ Filamentous		☐ Other:					
Algae Accumulation		☐ Mat		☒ Specks		☐ Scum		☐ Glob			
Algae Distribution		☒ Surface-Entire		☐ Surf-Localized		☐ Surf-Windblown		☒ Suspended		☐ Benthic ☐ Epiphytic	
Parameter Suite		Parameter Methods				Preservation		pH Check	#Bottles Sent to Lab	Bottle Group	
Algae ID (PT-50mL)		☐ ALGAE-ID				☐ Ice					
Bloom ID (PT-50mL)		☒ BLOOM-ID				☒ Ice			1	A	
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	B	
Toxins (BG-WD250)		☒ W-MCYST-AA / W-SAXTN-MS				☒ Ice			1	B	
		☐ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP				☐ Ice ☐ H2SO4		☐ <2			
Preserved Nutrients (500mL HDPE)		Acid Lot:		Exp:							
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice			1	B	
		Filter Lot #									
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C				☐ Ice		☐ Lugols			
Relinquished By:		Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
Brian Davis		05/04/2022 16:00		1		IM		5/5/22 9:20			

Date of Request: 25-MAR-2022
 Created By: PARRISH_J On: 25-MAR-2022
 Modified By: AYRES_J On: 02-MAY-2022
 Customer: WQAP
 Project: BLOOM-RESP
 Division: Division of Environmental Assessment and Restoration
 District:
 Event Description: Algal Bloom Response- NEROC

Send Coolers To:

Phone: 904-256-1700
 8800 Baymeadows Way West

 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Cooler Ship EMail: Jeremy.M.Parrish@dep.state.fl.us

Priority: 1
 Event Status: R
 Criminal Investigation: NO
 Chemistry Request Reviewed By: AYRES_J On: 02-MAY-2022
 Biology Request Reviewed By: AYRES_J On: 02-MAY-2022
 Sampling Kit Required: NO Ship on:
 Sampling Kit Shipped: YES On: 31-MAR-2022
 Sampling Kit Packed By: ROBERTS_Z
 Preservatives Needed: NO
 Date to Receive Samples: 11-APR-2022
 Logged In By: MCCOY_I On: 03-MAY-2022

Send Final Report To:

8800 Baymeadows Way West

 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Report Notification EMail:
 Jeremy.M.Parrish@dep.state.fl.us; Brian.G.Davis@floridadep.gov
 ;Amelia.Rankin@dep.state.fl.us

Comments:

Unless peak algal bloom season, may analyze toxin after consultation with Biology's Taxonomy Manager.

Bottle Group A - Priority 1
 For algal dominant taxon.

Bottle Group B - Priority 1
 For toxin testing, nutrients, and chlorophyll, algal full ID

There are multiple bottles per Group in case multiple sample targets or sample locations are needed. Samplers use best professional judgement to decide which samples are appropriate to collect for a particular response. All sets of bottles do not have to be filled at one time.

Please print two copies of algal job labels at login.

Bottle Group A (Biological) With 3 Samples:

Bottle Type: PT-50ML Number of Bottles: 3 Preserved With: ICE
 BLOOM-ID Template: DEFAULT (SOP-AB05) Assessment of dominant algal taxa in bloom or mat sample

Bottle Group B (Water) With 3 Samples:

Bottle Type: BP-1L Number of Bottles: 3 Preserved With: ICE
 CHLSUITE-W Template: DEFAULT (SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Bottle Type: BG-250ML-WDMTH Number of Bottles: 3 Preserved With: ICE
 W-MCYST-AA Template: (EPA 8321B) Microcystins in water matrices by HPLC/MS/MS
 W-SAXTN-MS Template: DEFAULT (EPA 8321B) Saxitoxin in water matrices by HPLC/MS/MS

Bottle Type: P-500ML Number of Bottles: 3 Preserved With: ICE And H2SO4
 W-NH3 Template: DEFAULT (EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
 W-NO2NO3 Template: DEFAULT (EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
 W-S-A-TP Template: DEFAULT (EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
 W-TKN Template: DEFAULT (EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices

Bottle Group B (Water) With 3 Samples:

Bottle Type: P-125ML	Number of Bottles: 3	Preserved With: FILTER-ICE
W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

* - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.