

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: Stitch

RQ: 2021-09-20-62

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.	Brice D.	9/21/21	8/8	21.1	762.7	8.9	8.9	100.4	✓	1.04	P/F	L/F
ICV	↓	↓	8/9	21.1	762.6	8.9	8.93	100.2	✓	1.04	P/F	L/F
CCV	Kim Appleby	↓	1550	24.2	761.5	8.4	8.44	100.5	✓	1.04	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.	Brice D.	9/21/21	747	210426B	5/22	1000	1000	P/F	L/F
ICV	↓	↓	750	210426A	5/22	100	101.8	P/F	L/F
CCV		↓	1552	210426D	5/22	20,000	20,044	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.	Brice D.	9/21/21	757	2104E81	4/23	7.02	21.3	7.02	-28.2	P/F	L/F
Calibr.	↓	↓	810	2107640	7/23	4.00	21.0	4.00	150.2	P/F	L/F
Calibr.	↓	↓	813	2107A04	12/22	10.04	21.3	10.04	-201.4	P/F	L/F
ICV	↓	↓	815	2104E81	4/23	7.02	21.3	7.07	-29.5	P/F	L/F
CCV	Kim Appleby	↓	1554	2107A04	12/22	10.03	21.8	10.07	-204.2	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 10 173.2, slope from 4 to 7 178.4 (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: 8/18/21

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	Brice D.	9/21/21	820	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- 09-20-62		Collected By:	Kim Appleby & Brian Davis	
Customer	21FLA	Field Report Prepared By:	Kim Appleby & Brian Davis	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP	

WIN ID/Field ID:  NEHAB0031

LSJR @ Arlington Boat Ramp

Comments: Algae streaks and concentrated on surface around dock & shoreline. Algae seen throughout water column

Matrix:	Marine	Collection Equipment:	ortho kit #244
Tide:	☐ Rising ☒ Falling ☐ Slack ☐ N/A	Coordinates:	30.333810, -91.612330
High Tide Time:	1125	Low Tide Time:	1603

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)
9/21/21	1025	6.36	84.3	28.9	7.67	0.36	7331	4.02	0.65	1.662
	1027	6.19	81.8	28.8	7.66	1.140	7404	4.05		

Bloom Observations					
Algal Bloom Observed? ☒ Yes ☐ No					
Water Surface	☐ Clear	☒ Scum	☒ 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 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
Kim Appleby	9/21/21 1025-1600	2		

LIMs QC: BD 10/21/2021

SULFURIC ACID >51%

HAZARDOUS

7784-89-8 7784-89-8

Contains: Conc. H2SO4

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/mist/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wear contaminated clothing before reuse. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Peel 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 corrosion resistant container with a resistant inner liner.

Contains: Conc. H2SO4

Lot No.: SA1105060

Expires: 04/30/22

See Safety Data Sheet (SDS)

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-20-62		Collected By: Kim Appleby + Brian Davis	
Customer: ZI FLA	Field Report Prepared By: Kim Appleby		
Project ID: BLOOM_RESP	Sampling Agency: FDEP		

WIN ID/Field ID: 

NEHAB0032

Pottsburg Creek @ River Hills Cr E

Comments: **Algae seen on surface + suspended throughout water column.**

Matrix: Marine		☒ Grab		Collection Equipment: Ortho Kit #44
Coordinates: 30.314680, -81.594310				
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A	High Tide Time: 1125	Low Tide Time: 1730		

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)
9/21/21	1105	5.12 ^{NA}	43.1 ^{NA}	28.4 ^{NA}	7.19 ^{NA}	0.330	685 ^{NA}	3.74 ^{NA}	0.75	1.338
		5.57	71.3	28.6	7.42		7105	3.88		

Bloom Observations			
Algal Bloom Observed? ☒ Yes ☐ No			
Water Surface	☐ Clear ☐ Scum	☒ Globes ☐ 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: Kim Appleby	Date/Time: 9/21/21 1600	Number of Coolers Shipped: _____	Received By: _____	Date/Time: _____
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LIMs QC: BD 10/21/2021

SULFURIC ACID >81%

HAZARDOUS

7732-18-0

THERMO FISHER SCIENTIFIC

520 NORTH MAIN STREET

MAINE, OH 43054

1-800-655-2711

Contains: Conc. H2SO4

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective 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/soak 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.

Lot No.: SA1105060

Expires: 04/30/22

See Safety Data Sheet (SDS)

Contains: Conc. H2SO4

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09 - 20-62		Collected By: Kim Appleby & Brian Davis	
Customer	ZFLA	Field Report Prepared By:	Kim Appleby
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID: 

NEHAB0033

LSJR @ St Vincent riverside

Comments: Algae seen on surface + suspended for throughout water column. Concentrated patches along concrete bulkheads and around hospital's pavilion.

Matrix: Fresh		Grab		Collection Equipment: ortho kit #44	
Coordinates: 30.306160, -81.689510					
Tide:	☐ Rising ☐ Falling ☒ Slack ☐ N/A	High Tide Time: 1147	Low Tide Time: 1814		

Water Quality										
Date	Time	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPTH)	Secchi Disk (m)	Total Depth (m)
9/21/21	1225	6.35	82.9	28.6	7.69	0.3	3847	2.02	0.65 0.6	0.639

Bloom Observations						
Algal Bloom Observed? ☒ Yes ☐ No						
Water Surface	☐ Clear	☒ Scum	☒ Globes	☐ 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
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:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
Kim Appleby	9/21/21 1600	2		

LIMs QC: BD 10/21/2021

SULFURIC ACID >51%
QUICKER 7884-65-4 7732-18-4
Contains: Conc. H2SO4
May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Peel off NOT soaked 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 continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Store in corrosion resistant container with a resistant inner liner.

Contains: Conc. H2SO4
Lot No.: SA1105060
Expires: 04/30/2022
See Safety Data Sheet (SDS)

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09 - 20 - 62		Collected By: Kim Appleby + Brian Davis	
Customer	21FLA	Field Report Prepared By:	Kim Appleby
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID:	 NEHAB0034	Comments: Algae on surface and suspended throughout water column. Mostly evenly distributed throughout water, some slight concentration around boat docks. Diffusely distributed
LSJR @ Marina Ortega Land		Collection Equipment: Ortho kit #44
Matrix: Fresh	Grab	Coordinates: 30.277000, -81.712780
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A	High Tide Time: 1147	Low Tide Time: 1814

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)
9/21/21	1305	6.60	87.1	28.8	7.65	0.309	2122	1.07	0.7	1.903
	1308	6.34	82.8	28.9	7.63	1.473	2330	1.19		

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
Kim Appleby	9/21/21 1600	2		

LIMs QC: BD 10/21/2021

SULFURIC ACID >51%
DANGER
7054-90-8
7723-14-6
Contains: Conc. H2SO4

THERMAL FISHING SCIENTIFIC
520 NORTH MAIN STREET
MAINE, ME 04101
1-207-665-2711

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/boots and eye protection. Avoid contact with skin and clothing. If swallowed, rinse mouth. Do not induce vomiting. If on skin (or hair), remove/take off contaminated clothing. If swallowed, rinse mouth with water. If inhaled, remove victim to fresh air and administer oxygen. If swallowed, rinse mouth with water. 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 corrosion resistant container with a resistant inner liner.

Contains: Conc. H2SO4
Lot No.: SA1105060
Expires: 04/30/22
See Safety Data Sheet (SDS)

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-20-62		Collected By: Kim Applby + Brian Davis	
Customer	21FLA	Field Report Prepared By:	Kim Applby
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID: 
NEHAB0035

~~LSJR @ Marina Ortega Land~~ Black Creek @ SR-17

Comments: Algae widespread and evenly distributed on surface and throughout water column. Diffusely distributed.

Matrix: Fresh		Collection Equipment: ortho Kit #44
Tide: ☐ Rising ☐ Falling ☐ Slack ☐ N/A		Coordinates: 30.042051, -81.712185
High Tide Time: 1409		Low Tide Time: 2038

Water Quality										
Date	Time	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPTH)	Secchi Disk (m)	Total Depth (m)
9/21/21	1415	5.61	71.4	30.1	7.31	0.3	620	0.30	0.8	1.368

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
Kim Applby	9/21/21 1600	2		

LIMs QC: BD 10/21/2021

SULFURIC ACID >51%
DANGER 7504+8-4 7702+8-4
May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective 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 NOT soaked clothing. 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 corrosion resistant container with a resistant liner liner.

Contains: Conc. H2SO4
Lot No.: SA1105060
Expires: 04/30/22
See Safety Data Sheet (SDS)

Contains: Conc. H2SO4
Lot No.: SA1105060
Expires: 04/30/22
See Safety Data Sheet (SDS)