

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- 2021-09-20-34

Project: SMP/Algae Re.

2021 09-06-43

- 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.	Brian Davis	9/16	805	21.2	760.1	8.9	/	100.0	/	1.05	P/F	L/F
ICV	↓	↓	807	21.2	760.1	8.9	8.88	99.9	/	1.05	P/F	L/F
CCV	↓	↓	1517	22.9	759.8	8.6	8.7	101.2	/	1.05	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	9/16	739	210426B	5/22	1000	1000	P/F	L/F
ICV	↓	↓	741	210426A	5/22	29,000	20367	P/F	L/F
CCV	↓	↓	1519	210426A	5/22	100	100.9	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	9/16	747	2104E81	4/23	7.02	21.4	7.02	-33.9	P/F	L/F
Calibr.	↓	↓	755	2103659	3/23	4.00	21.3	4.00	141.6	P/F	L/F
Calibr.	↓	↓	758	2107A04	12/22	10.04	21.4	10.04	-203.1	P/F	L/F
ICV	↓	↓	801	2104E81	4/23	7.02	21.4	7.05	-33.3	P/F	L/F
CCV	↓	↓	1522	2107A04	12/22	10.04	21.9	21.9	208.4	P/F	L/F
CCV								10.11		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 10 169.2, slope from 4 to 7 125.5 (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	Brian Davis	9/16	809	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- <u>09-06-43</u>		Collected By: <u>Kim Appleby + Brian Davis</u>	
Customer: <u>ZIFLA</u>		Field Report Prepared By: <u>Kim Appleby</u>	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID:	 NEHAB0029	Comments: <u>Algae streaks seen on surface of water and concentrated along shore-line. Algae seen throughout water column.</u>
LSJR @ end of Blake Ave		Collection Equipment: <u>ortho kit #7</u>

Matrix: <u>Fresh</u>	☒ Grab	Coordinates: <u>30.174050 -81.697170</u>
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A	High Tide Time: <u>800</u>	Low Tide Time: <u>1440</u>

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)
<u>9/16/21</u>	<u>1310</u>	<u>10.15</u>	<u>134.7</u>	<u>29.9</u>	<u>8.59</u>	<u>0.3</u>	<u>779</u>	<u>0.38</u>	<u>0.572</u> (5)	<u>0.572</u>

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		<u>1</u>	<u>A</u>
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☐ Ice		<u>1</u>	<u>B</u>
Toxins (BG-WD250)	☒ W-MCYST-AA	☐ Ice		<u>1</u>	<u>B</u>
Preserved Nutrients (500mL HDPE)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP	☒ Ice ☒ H2SO4	☒ <2	<u>1</u>	<u>B</u>
	Lot: <u>SA0353110</u>	Exp: <u>11/11/22</u>	☐ <2		
Filtered Nutrients (P125mL)	☒ W-PO4-F ☒ Field Filtered 0.45um Filter	☒ Ice		<u>1</u>	<u>B</u>
Quantitative Algae	☒ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

Relinquished By: <u>Kim Appleby</u>	Date/Time: <u>9/16/21</u>	Number of Coolers Shipped: <u>2</u>	Received By:	Date/Time:
<u>[Signature]</u>	<u>1600</u>			

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-06-43	Collected By: Kim Appleby + Brian Davis
Customer: 21 FLA	Field Report Prepared By: Kim Appleby
Project ID: BLOOM_RESP	Sampling Agency: FDEP

Comments: No algae seen.

WIN ID/Field ID:



NEHAB0025

LSJR end of Oakvale Rd

Matrix: Fresh		Collection Equipment: ortho 4 #7								
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A		Coordinates: 30.109630 -81.643050								
High Tide Time: 920		Low Tide Time: 1620								
Water Quality										
Date	Time	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPT)	Secchi Disk (m)	Total Depth (m)
9/16/21	1155	5.55	72.7	29.3	7.44	0.3	773	0.37	1.1	1.545
	1158	5.48	71.6	29.2	7.13	0.98	780	0.38		

Bloom Observations

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 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: 9/16/21 1600	Number of Coolers Shipped: 2	Received By:	Date/Time:	

LIMs QC'd: BD 10/21/21

SULFURIC ACID >51%
 DANGER
 THERMO FISHER SCIENTIFIC
 520 NORTH MAIN STREET
 MAINE, OK 74354
 1-800-555-7711
 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. 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. Holding eye closed. Do not remove contact lenses. Continue with a standard eye exam.

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

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- <u>09-06-43</u>		Collected By: <u>Kim Appleby + Brian Davis</u>								
Customer	<u>ZIFLA</u>	Field Report Prepared By:	<u>Kim Appleby</u>							
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
Field ID:		Comments: <u>No algae seen.</u>								
WIN ID/Field ID:  NEHAB0024		Collection Equipment: <u>Ortho kit #7</u>								
Christopher Creek below San Jose Blvd		Coordinates: <u>30.252490 -81.642340</u>								
Matrix:	<u>Fresh</u>	<u>Grab</u>								
Tide:	☐ Rising ☒ Falling ☐ Slack ☐ N/A	High Tide Time:	<u>800</u>							
		Low Tide Time:	<u>1440</u>							
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)
<u>9/16/21</u>	<u>1045</u>	<u>3.67</u>	<u>47.0</u>	<u>28.0</u>	<u>7.07</u>	<u>0.3</u>	<u>944</u>	<u>0.46</u>	<u>0.9</u>	<u>1.057</u>
Bloom Observations										
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		<u>1</u>	<u>A</u>				
Chlorophyll (BP-1L)	☒ CHLSUITE-W		☒ Ice		<u>1</u>	<u>B</u>				
Toxins (BG-WD250)	☒ W-MCYST-AA		☒ Ice		<u>1</u>	<u>B</u>				
Preserved Nutrients (500mL HDPE)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP		☒ Ice ☒ H2SO4	☒ <2	<u>1</u>	<u>B</u>				
	Lot	<u>5A1105060</u>	Exp:	☐ <2						
Filtered Nutrients (P125mL)	☒ W-PO4-F		☒ Field Filtered 0.45um Filter	☒ Ice	<u>1</u>	<u>B</u>				
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C		☐ Ice	☐ Lugols						
Relinquished By:	Date/Time	Number of Coolers Shipped		Received By:	Date/Time					
<u>Kim Appleby</u> <u>Ky</u>	<u>9/16/21 1600</u>	<u>2</u>			<u>Heidi</u>					

LIMs QC'd: BD 10/21/21

SULFURIC ACID >51%
DANGER
7584-89-4
7502-93-4
Contains: Conc. H2SO4

THermo FISHER SCIENTIFIC
320 NORTH MAIN STREET
MAINE, OH 43054
1-800-889-2711

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/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/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: Flush 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: 04/20/22
See Safety Data Sheet (SDS)