

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: Algal 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.	Brian Davis	10/5/21	800	21.0	761.1	8.9	8.9	100.1	✓	1.03	P/F	L/F
ICV			802	21.0	761.2	8.9	8.93	100.2	✓	1.03	P/F	L/F
CCV	J. Lee		1358	24.4	761.0	8.4	8.38	100.2	—	1.03	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Brian Davis	10/5/21	737	210426B	5/22	1000	1000	P/F	L/F
ICV			739	210426C	5/22	1413	1422	P/F	L/F
CCV	J. Lee		1400	210426A	5/22	100	103.0	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	10/5/21	746	2107F56	7/23	7.02	21.1	7.02	-40.0	P/F	L/F
Calibr.			753	2107G40	7/23	4.00	21.1	4.00	137.9	P/F	L/F
Calibr.			756	2107A04	12/22	10.04	21.1	10.04	-207.0	P/F	L/F
ICV			758	2107F56	7/23	7.02	21.2	7.06	-38.9	P/F	L/F
CCV	J. Lee		1402	2107A04	12/22	10.03	22.3	10.21	-214.1	P/F	L/F
CCV								10.12		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 10 167.0, slope from 4 to 7 177.9 (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	10/5/21	803	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>09-27-47</u>		Collected By: <u>Brian P. Jessica L</u>	
Customer: <u>WQMP</u>	Field Report Prepared By: <u>B. Davis</u>		
Project ID: BLOOM_RESP	Sampling Agency: FDEP		

WIN ID/Field ID: 
NEHAB0029

LSJR @ end of Blake Ave

Comments:

Matrix: <u>Fresh</u>		<u>Grab</u>	Collection Equipment: <u>Ona 40 #7</u>
Coordinates: <u>30.174320, -81.697150</u>			
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A	High Tide Time: <u>724</u>	Low Tide Time: <u>1458</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>10/5/21</u>	<u>1155</u>	<u>6.61</u>	<u>84.9</u>	<u>28.4</u>	<u>7.63</u>	<u>0.3</u>	<u>831</u>	<u>0.40</u>	<u>0.88</u>	<u>0.88</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>SA1105060</u>	Exp: <u>4/10/22</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>B-D-</u>	Date/Time: <u>10/5/21 1600</u>	Number of Coolers Shipped: <u>2</u>	Received By:	Date/Time:
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LIMs QC: BD 10/21/2021

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-27-47		Collected By: Brian D. Jessick L	
Customer	WQMP	Field Report Prepared By: Brian D.	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID: 

NEHAB0047

Mouth of Deep Bottom Creek

Comments:

Matrix: Fresh		☒ Grab		Collection Equipment: On40 #7	
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A		Coordinates: 30.177240, -81.642200		High Tide Time: 924 Low Tide Time: 1458	

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)
10/5/21	1120	6.95	87.4	27.4	7.49	0.25	746	0.36	0.58	0.58

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	1	
Filtered Nutrients (P125mL)	☒ W-PO4-F ☒ Field Filtered 0.45um Filter	☒ Ice		1	3
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C	☐ Ice ☐ Lugols			

Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
B.D.	10/5/21 1600	2		

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-27-47		Collected By: Brian Davis, Jessica L								
Customer	WQMP	Field Report Prepared By:	Brian D.							
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
Field ID:		Comments:								
WIN ID/Field ID:										
 NEHAB0046										
Plumber's Cove										
Matrix: Fresh		Collection Equipment: Outho #7								
Tide: ☐ Rising ☒ Falling ☐ Slack ☐ N/A		Coordinates: 30.192160, -81.636910								
High Tide Time: 924		Low Tide Time: 1458								
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)
10/5/20	1045	7.22	92.7	27.7	7.63	0.3	800	0.39	0.6	1.98
		6.52	82.6	27.4	7.61	1.5	800	0.39		
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	3			
Quantitative Algae	☐ DTY-QN-C / PKD-QN-C		☐ Ice	☐ Lugols						
Relinquished By:	Date/Time	Number of Coolers Shipped			Received By:	Date/Time				
B-D.	10/5/21/600	2								

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- <u>09-27-47</u>		Collected By: <u>Brian P. Jessica L</u>	
Customer	<u>WQMP</u>	Field Report Prepared By:	<u>Brian P.</u>
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID: 

NEHAB0042

Yacht Basin

Comments:

Matrix:	<u>Fresh</u>	☒ Grab	Collection Equipment:	<u>30.250750, 81.689350</u>
Tide:	☒ Rising ☐ Falling ☐ Slack ☐ N/A	Coordinates:	<u>Out to #7</u>	
High Tide Time:		<u>924</u>	Low Tide Time: <u>1458</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>10/5/21</u>	<u>1005</u>	<u>6.49</u>	<u>82.3</u>	<u>27.5</u>	<u>7.62</u>	<u>0.3</u>	<u>879</u>	<u>0.43</u>	<u>0.6</u>	<u>1.8</u>
	<u>1010</u>	<u>6.30</u>	<u>80.0</u>	<u>27.4</u>	<u>7.61</u>	<u>1.3</u>	<u>941</u>	<u>0.46</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>D</u>
	Lot <u>NA SA1105060</u>	Exp: <u>4/30/22</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:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time
<u>Brian P.</u>	<u>10/5/21 1600</u>	<u>2</u>		

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By: Brian D. Jessica L	
Customer	WQMP	Field Report Prepared By:	Brian D.
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID: 

NEHAB0040

Mouth of Goodby's Creek

Comments:

Matrix:	Fresh	Grab	Collection Equipment:	Outbo #7
Tide:	☒ Rising ☐ Falling ☐ Slack ☐ N/A	Coordinates:	10-21 6560, -81.623350	
High Tide Time:		924	Low Tide Time: 1458	

Water Quality										
Date	Time ☐ EST ☐ CEN	D.O. (mg/L)	D.O. (%)	Temp °C	pH (SU)	Sample Depth (m)	Cond. (umho/cm)	Salinity (PPTth)	Secchi Disk (m)	Total Depth (m)
10/5/21	920	6.40	81.1	27.7	2.52	0.3	798	0.39	0.9	1.0

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
B.D.	10/5/21 1600	2		

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-27-47		Collected By: Brian D., Jessica L	
Customer	WQMP	Field Report Prepared By: Brian D.	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID:  NEHAB0024

Christopher Creek below San Jose Blvd

Comments:

Matrix: Fngs		☒ Grab		Collection Equipment: Ortho #7
Tide: ☒ Rising ☐ Falling ☐ Slack ☐ N/A		Coordinates: 30.252670, -81.62010		High Tide Time: 924 Low Tide Time: 1458

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)
10/5/21	940	6.83	86.9	27.6	7.64	0.3	903	0.44	0.8	0.98

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: 4/20/22		☐ <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
Brian D.	10/5/21 1600	2		