

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: 2021-09-27-47

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.	Kim Appleby	9/27/21	845	20.6	765.0	9.0	—	100.3	—	1.03848	P/F	P/F
ICV			848	20.8	765.0	9.0	9.02	100.7	—	1.03748	P/F	P/F
CCV	J. Lee		1621	23.1	762.9	8.6	8.63	100.8	—	1.03848	P/F	P/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.	Kim Appleby	9/27/21	850	210926B	5/22	1000	1000	P/F	P/F
ICV			852	210926C	5/22	1413	1398	P/F	P/F
CCV	J. Lee		1619	210426A	5/22	160	101.4	P/F	P/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.	Kim Appleby	9/27/21	901	2104E81	4/23	7.02	21.0	7.02	-31.6	P/F	P/F
Calibr.		9/27/21	904	2107G40	7/23	4.00	20.9	4.00	147.7	P/F	P/F
Calibr.		9/27/21	906	2107A04	12/22	10.00	20.8	10.00	-202.1	P/F	P/F
ICV		9/27/21	909	2107G40	7/23	4.00	20.9	4.00	147.7	P/F	P/F
CCV	J. Lee			2107A04	12/22	10	21	3.97	148.6	P/F	L/F
CCV	J. Lee	9/27/21		2107A04	12/22	10.03	21.7	9.98	-202.5	P/F	P/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 10 170.5, slope from 4 to 7 179.3 (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: 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	Kim Appleby	9/27/21	911	0.00	0.00	P/F	P/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

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: YSI Bruce

RQ- 2021-09-27-12

Project: SMP LSR Boat

- 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.	J Parrish	9/27/21	745	20.3	764.2	9.1	9.1	100.5	—	1.028	(P) F	(L) F
ICV	J	9/27/21	746	20.3	764.3	9.1	9.09	100.5	—	1.028	(P) F	(L) F
CCV	Brian Davis	7/27/21	1636	23.7	762.5	8.5	8.47	100.00	—	1.028	(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.	J Parrish	9/27/21	747	210426B	5/22	1000	1000	(P) F	(L) F
ICV	J	9/27/21	748	210426A	5/22	100	101	(P) F	(L) F
CCV	J. Lee	9/27/21	1639	210426C	5/22	1413	1370	(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.	J Parrish	9/27/21	751	2104E81	4/23	7.	20.7	7.00	-42.6	(P) F	(L) F
Calibr.	J	9/27/21	752	2107640	7/23	4.	20.6	4.00	132.8	(P) F	(L) F
Calibr.	J	9/27/21	753	2107A04	12/22	10.	20.7	10.00	133.1	(P) F	(L) F
ICV	J	9/27/21	754	2107640	7/23	4.	20.7	4.04	130.1	(P) F	(L) F
CCV	J. Lee	9/27/21	1642	2107A04	11/22	10.03	21.6	9.97	-209.2	(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 10 105.7, slope from 4 to 7 176.5 (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	J Parrish	9/27/21	800	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-2021-09-27-47		Collected By: Kim Appleby Victoria Quick	
Customer	21FLA	Field Report Prepared By:	Victoria Quick + Kim Appleby
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID:  NEHAB0024

Christopher Creek below San Jose Blvd

Comments: algae seen on surface and suspended in water column, mostly disposed some streaking on surface

Matrix:	Fresh	Grab	Collection Equipment:	Brtho Kit #7
Tide:	☐ Rising ☐ Falling ☒ Slack ☐ N/A	Coordinates:	30.252680 -81.642020	
		High Tide Time:	1500	Low Tide Time: 840

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)
9/27	14:40	8.87	114.7	28.7	7.12	0.3	777	0.38	0.8	0.86

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 SA1205060	Exp: 04/30/22	☐ <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	9/27/21 1:30 PM	1		

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By: Kim Appleby Victoria Quirk	
Customer	21FLA	Field Report Prepared By: Victoria Quirk + Kim Appleby	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID: 

NEHAB0041

LSJR @ Worth Dr S

Comments: Algal seen on surface and suspended in water column, dispersed

Matrix: Fresh		Grab		Collection Equipment: Ortho kit #7	
Tide: ☒ Rising ☐ Falling ☐ Slack ☐ N/A		Coordinates: 30.271200 -81.655150		High Tide Time: 1500 Low Tide Time: 1840	

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)
9/27	13:55	8.32	107.3	28.4	7.75	0.3	777	0.38	0.7	1.126

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: 04/30/22		☐ <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	9/27/21 16:00	1		

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By: Kim Appleby Victoria Quick								
Customer	21FLA	Field Report Prepared By:	Victoria Quick & Kim Appleby							
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
Field ID:		Comments: concentrated on shoreline, suspended in water and seen on surface. Starting to form a slick on edge line, away from shoreline algae diffused and seen in river near site, algae streaking and concentrated along shoreline.								
WIN ID/Field ID:  NEHAB0043		Collection Equipment: Ortho Kit #7								
Matrix: Fresh		Coordinates: 30.311800 -81.625720								
Tide: ☒ Rising ☐ Falling ☐ Slack ☐ N/A		High Tide Time: 1510 Low Tide Time: 910								
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)
9/27	11:15	8.06	103.3	27.9	7.75	0.3	1310	0.65	0.5	0.525
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: 04/30/22		☐ <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		9/27/21 16:00 1800		1						

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-27-47		Collected By:	B Davis, J Periss							
Customer	WQMP	Field Report Prepared By:	B Davis							
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
Field ID:		Comments:								
WIN ID/Field ID.		 NEHAB0042 Yacht Basin								
Matrix:		Collection Equipment:	0-150 #3							
Tide: ☒ Rising ☐ Falling ☐ Slack ☐ N/A		Coordinates:	30.251740, -81.689790							
☐ Grab		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)
9/27/21	1100	8.50	108.4	27.7	8.13	0.3	800	0.39	0.7	1.3
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. Davis	9/27/21 1600		2							

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021- 09-27-47		Collected By: B Davis J Perish	
Customer	WQMP	Field Report Prepared By:	B Davis
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP

WIN ID/Field ID:  NEHAB0029

LSJR @ end of Blake Ave

Comments:

Collection Equipment: Outho #3

Coordinates: 30.1745 -81.69717

Matrix: Fresh (Grab)

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 (PPT)	Secchi Disk (m)	Total Depth (m)
9/27/21	1140	10.21	131.0	28.2	8.63	0.3	809	0.39	0.3	0.6

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: Fish kill

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 Lot SA1105060 Exp: 4/30/22	☒ Ice ☒ H2SO4	☐ <2	1	B
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	9/27/21 1600	2		

Cyanobacteria Bloom Response Field Data Sheet

RQ-2021-09-27-47		Collected By:	B Davis, J Parrish	
Customer	WQMP	Field Report Prepared By:	B Davis	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP	

WIN ID/Field ID: 

NEHAB0044

Brown L. Whitley Memorial Park

Comments:

Filamentous Algae Bloom.

Matrix:	Fresh	☒ Grab	Collection Equipment:	Outh #3
Tide:	☐ Rising ☐ Falling ☐ Slack ☒ N/A	Coordinates:	30.302570, -81.650640	
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)
9/27/21	10:00	9.96	122.6	25.9	6.91	0.1	525	0.25	0.2	2.0
									(5)	0.2

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 SA110506	Exp: 4/30/21	☒ <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	9/27/21 1600	2		