

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:

57124

RQ:

2021-04-12-41

Project:

Polical C/M/HAB

- 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

2/15

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 D.	4/15/21	753	21.8	760.2	8.8	8.75	100.0	✓	1.03	P/F	L/F
ICV			754	22.0	760.2	8.7	8.75	100.1	✓	1.03	P/F	L/F
CCV			1701	22.1	756.8	8.7	8.65	99.6	✓	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 D.	4/15/21	757	201222B	1/22	1000	1000	P/F	L/F
ICV			759	201222A	1/22	100	103.3	P/F	L/F
CCV			1707	200407B	4/21	20,000	19605	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 D.	4/15/21	806	2010F27	10/22	7.01	23.6	7.01	-19.5	P/F	L/F
Calibr.			813	2010C31	9/22	4.00	23.5	4.00	157.7	P/F	L/F
Calibr.			820	2012797	5/22	10.01	23.6	10.02	-192.3	P/F	L/F
ICV			825	2010F21	10/22	7.04	23.5	7.03	-19.1	P/F	L/F
CCV			1710	2010C31	9/22	4.00	23.4	4.00	157.0	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 _____, slope from 4 to 7 _____ (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: _____

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 D.	4/15/21	810	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-2019-2021-04-19-47		Collected By:	BD KM							
Customer	21FLA	Field Report Prepared By:	B V							
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP							
Field ID:	Comments:		Visit # 4							
WIN ID/Field ID:		Collection Equipment: Ortho kit # 44								
 NEHAB0014 Lake Winnott @ 147 Bakers Acres DR										
Matrix:	SW	Grab	Coordinates:							
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)
4/15/21	1145	8.08	96.7	24.5	7.04	0.3	51.0	0.02	1.4	2.2
	1148	6.53	73.9	21.4	7.15	1.7	51.4	0.02		
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: RO SA0293040		Exp: 10/19/21		☒ <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	1	B		
Relinquished By:	Date/Time	Number of Coolers Shipped		Received By:		Date/Time				
B-P-	4/15/21 1600	1								

RQ-2021-04-19-47

Login Checklist

Login Station ID: #4

Shipping Method: FedEx | UPS | HD | GreyhoundDate/Time of Receipt: 04/16/2021 @ 9:30

*Cooler Temperature	Samples Frozen?	* All Samples in Cooler Preserved with		Number of Sample Containers in Cooler	Evidence Tape				Waybill Tracking #
					Present?		*Intact?		
	YES	HNO ₃	Formalin		Yes	No	Yes	No	
1.9 °C				6		X			9293 8011 3616

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 °C (above 10.0 °C 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 X

CONTAINER CHECK

Evidence Tape on Bottles?

Yes _____ No _____ NA X

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 X Init: TJLWV

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: TJLWV

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

Yes _____ No _____ NA X Init: TJLWV

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

Coolers Unpacked/Checked by: TJLWVDate: 04/16/2021Event contains NCRs (Y/N)? N

Event ID:

Algal Bloom Response- NEROC
 WQAP-2021-04-16-01 (BLOOM-RESP)
 Date Received: 16-APR-2021 09:30

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Additional Comments:

Infrared Thermometer ID:	#4 Temp Gun EXP:10/28/2021
pH Test Strips 0 – 6	N/A
pH Paper 0 – 3	N/A
pH Paper 0 – 13	231019 EXP:11/01/2022
Chlorine Test Strips	0261 EXP:05/2023

ENCORE SAMPLES

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

Were Encore 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:

57174

RO

2021-04-12-41

Project:

Polina CM/HAB

- 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

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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
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CCV			1701	22.1	756.8	8.7	8.65	99.6	✓	1.03	P/F	L/F
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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.

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Conductivity Acceptance criteria $\pm 5\%$

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Calibr.			820	2012797	5/22	10.01	23.6	10.02	-19.1	P/F	L/F
ICV			825	2010F21	10/22	7.04	23.5	7.03	-19.1	P/F	L/F
CCV			1710	2010C31	9/22	4.00	23.4	4.00	157.0	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 _____, slope from 4 to 7 _____ (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:

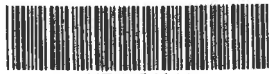
If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

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 D.	4/15/21	810	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-2019-2021-04-19-47		Collected By:	BD KM	
Customer	21FLA	Field Report Prepared By:	BD	
Project ID:	BLOOM_RESP	Sampling Agency:	FDEP	
Field ID:		Comments:		
WIN ID/Field ID:		Visit #4		
 NEHAB0014 Lake Winnott @ 147 Bakers Achers Dr		Collection Equipment:	Ortho Kit #44	
Matrix:	SW	Grab	Coordinates:	
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 (PPTH)	Secchi Disk (m)	Total Depth (m)
4/15/21	1145	8.08	96.7	24.5	7.04	0.3	510	0.02	14	22
	1148	6.53	73.9	21.4	7.15	1.7	514	0.02		

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 Lot: RO 5A0228010 Exp: 10/19/21	☒ Ice ☒ H2SO4 ☒ <2		1	B
Filtered Nutrients (P125mL)	☒ W-PO4-F ☐ Field Filtered 0.45um Filter CONF 35407	☒ Ice		1	B
Quantitative Algae	☒ DTY-QN-C / PKD-QN-C	☒ Ice ☒ Lugols		1	B
Relinquished By:	Date/Time	Number of Coolers Shipped	Received By:	Date/Time	
B-P-	4/15/21 1600	1			

Date of Request: 30-MAR-2021
 Created By: PARRISH_J On: 30-MAR-2021
 Modified By: JASROTIA_P On: 30-MAR-2021
 Customer: WQAP
 Project: BLOOM-RESP
 Division: Division of Environmental Assessment and Restoration
 District:
 Event Description: Algal Bloom Response- NERO

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: 3
 Event Status: S
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 30-MAR-2021
 Biology Request Reviewed By: JASROTIA_P On: 30-MAR-2021
 Sampling Kit Required: YES Ship on: 09-APR-2021
 Sampling Kit Shipped: YES On: 09-APR-2021
 Sampling Kit Packed By: SHAIK_A
 Preservatives Needed: NO
 Date to Receive Samples: 19-APR-2021
 Logged In By:

Send Final Report To:

8800 Baymeadows Way West

 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Report Notification Email:
 Jeremy.M.Parrish@dep.state.fl.us; Alicia.Hogue@dep.state.fl.us;
 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, 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: BP-1L	Number of Bottles: 3	Preserved With: Lugols
DTY-QN-C	Template: DEFAULT	(SOP-AB05_1) No. of diatom taxa of quantitative phytoplankton sample.
PKD-QN-C	Template: DEFAULT	(SOP-AB05) No. of wet taxa of quantitative phytoplankton sample.
Bottle Type: BG-250ML-WDMTH	Number of Bottles: 3	Preserved With: ICE
W-MCYST-AA	Template: DEFAULT	(EPA 8321B) Microcystins 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 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.