

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: Desi

RQ: 2019-05-20-12

Project: Brooklyn LVI

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 6/21

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.	<u>B = D =</u>	<u>7/8/19</u>	<u>735</u>	<u>24.1</u>	<u>758.6</u>	<u>8.4</u>	<u>8.4</u>	<u>99.8</u>	<u>1</u>	<u>1</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>736</u>	<u>24.1</u>	<u>758.5</u>	<u>8.4</u>	<u>8.39</u>	<u>99.9</u>	<u>1</u>	<u>1</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1521</u>	<u>24.0</u>	<u>757.2</u>	<u>8.4</u>	<u>8.29</u>	<u>98.6</u>	<u>1</u>	<u>1</u>	<u>P/F</u>	<u>L/F</u>
CCV											<u>P/F</u>	<u>L/F</u>

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.	<u>B = D =</u>	<u>7/8/19</u>	<u>741</u>	<u>190430A</u>	<u>5/20</u>	<u>1000</u>	<u>1004</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>747</u>	<u>190319B</u>	<u>3/20</u>	<u>100</u>	<u>104.2</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1524</u>	<u>0424820</u>	<u>6/20</u>	<u>24,820</u>	<u>25019</u>	<u>P/F</u>	<u>L/F</u>
CCV								<u>P/F</u>	<u>L/F</u>

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 mV	mV	Pass / Fail	Lab / Field
Calibr.	<u>B = D =</u>	<u>7/8/19</u>	<u>751</u>	<u>2904CS4</u>	<u>3/21</u>	<u>7.0</u>	<u>7.0</u>	<u>24.7</u>	<u>-9.6</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>754</u>	<u>2904B00</u>	<u>3/21</u>	<u>4.0</u>	<u>24.7</u>	<u>4.01</u>	<u>170.1</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>757</u>	<u>2901B51</u>	<u>7/20</u>	<u>10.01</u>	<u>24.8</u>	<u>10.0</u>	<u>-183.1</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>759</u>	<u>2904CS4</u>	<u>3/21</u>	<u>7.0</u>	<u>24.7</u>	<u>7.03</u>	<u>8.7</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1525</u>	<u>2904B00</u>	<u>3/21</u>	<u>4.0</u>	<u>24.6</u>	<u>4.06</u>	<u>165.4</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>327</u>	<u>2901B51</u>	<u>7/20</u>	<u>10.0</u>	<u>24.6</u>	<u>10.05</u>	<u>-186.5</u>	<u>P/F</u>	<u>L/F</u>

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	<u>B = D =</u>	<u>7/8/19</u>	<u>8/801</u>	<u>0.00</u>	<u>0.00</u>	<u>P/F</u>	<u>L/F</u>

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

COMMENTS:

Effective Date: 08/04/2014
Revision Date: 08/04/2014
Author: E. Miller
AB-17-1.7

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY LSJP		DATE (MD/YY): 7/8/19	TIME: (AM) 1420	Case ID#:
COUNTY: Paul	LOCATION: End of Stockton		NEAREST TOWN/CITY: Jax	
Visit Type: Initial ☐ Recon ☐ Sampling ☒ Follow- ☐	Samples collected: ☒ yes ☐ no	Samples submitted to:	Photos Taken: ☒ yes ☐ no	
Sample collection method: Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐				
Sample & Analysis types: Aqueous: ☒ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐				
Algal ID & enumeration: ☒ Nutrients: ☒ Chl-a: ☒ AGP: ☐ Turbidity: ☐ Toxin: ☐				
Estimated size of bloom:		Impounded: ☒ yes ☐ no	Stream/River/Canal m wide	
Lake/Estuary Typical depth m deep	Inflows: ☐ yes ☐ no	Typical Transect m deep	1.0 m deep	m deep
Outflows: ☐ yes ☐ no	Water velocity m/s	m/s	m/s	m/s
Canopy Cover: Open: ☒ Lightly Shaded (11-45%): ☐ Moderately Shaded (46-80%): ☐ Heavily Shaded: ☐				
Description of Bloom/ Latitude Degrees Minutes Seconds Longitude Degrees Minutes Seconds Clear, Hot. 30.308070 81.686423				
Present Weather conditions				
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)				
Sketch bloom area on the attached map. Indicate wind direction.				
Last rain event				
Rainfall amount				

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	Salinity ppt	Secch (m)
Top	0.3	21.5	8.24	8.78	1112	6.61	0.9
Mid-depth				123.4			
Bottom							
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order 5th - 6th order 7th order or greater) Lake: ☐ Wetland: ☐ Estuary: ☐ Other: ☐							
Water Odors (check box): Normal: ☒ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Other: ☐							
Water Surface (check box): Clear: ☒ Scum: ☐ Globbs: ☐ Slick: ☐							
Water Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐							
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐							
Abundance:				Absent Rare Common Abundant			
Periphyton				☒ ☐ ☐ ☐			
Fish				☒ ☐ ☐ ☐			
Aquatic Macrophytes				☒ ☐ ☐ ☐			
Iron/sulfur Bacteria				☒ ☐ ☐ ☐			

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

TEAM:
B Davis
K Applebee

Rec NED

AGENCY:

B-D

Algae Bloom Response-as needed

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

Requester: Jeremy M. Parrish

Field Report Prepared By:

Kimberly Appleby

Project ID: BLOOM-RESP

Collected By:

Brian Davis & Kimberly Appleby

Sampling Agency:

DEAR ROL NET

Location <u>LSJR @ End of stockton</u>		☐ Comp ☐ Grab	Collection (comp begin or grab) Date <u>7/8/17</u> Time <u>1420</u>		☒ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) <u>Salt</u>		Diss. Oxygen <u>8.78</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		<u>A, B</u>
WIN/STORET #		Temp (C) <u>31.5</u>	pH <u>8.24</u>	Sample Depth <u>0.3</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>11712</u>		<u>C, D</u>
Latitude <u>30.508070</u>	☒ dd ☐ dms	Longitude <u>-81.686423</u>	☒ dd ☐ dms	Salinity (ppt) <u>6.61</u>	Comments			
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		☐ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments			
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		☐ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments			
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		☐ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments			

Relinquished By: <u>[Signature]</u>	Date/Time <u>7/8/2019 16:30</u>	Shipping Method <u>Fed Ex</u>	Number of Coolers Shipped: <u>1</u>	Received By:	Date/Time
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Group: A	Bottle Type: BLOOM-ID	PT-50ML	# of Bottles: 9	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
Group: B	Bottle Type: W-MCYST-AA	BG-250ML-WDMT H	# of Bottles: 9	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
Group: C	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 9	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
Group: C	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN	P-500ML	# of Bottles: 9	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	<u>1</u>
Group: C	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 9	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
Group: D	Bottle Type: DTY-QN-C PKD-QN-BV	BP-1L	# of Bottles: 9	Preservative: Lugols	Enter Number of Bottles Sent to Lab	<u>1</u>