

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: Peri

RQ: 2022-07-04-55

Project: Algae Re-Plant

- 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 5/2/22

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>Brian Davis</u>	<u>7/6/22</u>	<u>855</u>	<u>23.7</u>	<u>761.9</u>	<u>8.5</u>	<u>✓</u>	<u>100.3</u>	<u>✓</u>	<u>1.01</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>857</u>	<u>23.7</u>	<u>762.0</u>	<u>8.5</u>	<u>8.48</u>	<u>100.1</u>	<u>✓</u>	<u>1.01</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1625</u>	<u>23.9</u>	<u>759.7</u>	<u>8.4</u>	<u>8.45</u>	<u>100.2</u>	<u>✓</u>	<u>1.01</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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	<u>Brian Davis</u>	<u>7/6/22</u>	<u>837</u>	<u>220225A</u>	<u>3/23</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>839</u>	<u>210917A</u>	<u>9/22</u>	<u>1413</u>	<u>1424</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1626</u>	<u>211122A</u>	<u>12/22</u>	<u>15,000</u>	<u>14957</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 SU	mV	Pass / Fail	Lab / Field
Calibr.	<u>Brian Davis</u>	<u>7/6/22</u>	<u>844</u>	<u>4203387</u>	<u>2/24</u>	<u>7.00</u>	<u>23.9</u>	<u>7.00</u>	<u>-10.1</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>846</u>	<u>2205F96</u>	<u>5/24</u>	<u>4.00</u>	<u>23.7</u>	<u>4.00</u>	<u>168.2</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>849</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.01</u>	<u>23.9</u>	<u>10.01</u>	<u>-182.1</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>853</u>	<u>4203387</u>	<u>2/24</u>	<u>7.00</u>	<u>23.9</u>	<u>7.03</u>	<u>-9.5</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1628</u>	<u>2202A63</u>	<u>7/23</u>	<u>10.01</u>	<u>24.5</u>	<u>10.04</u>	<u>-185.4</u>	<u>P/F</u>	<u>L/F</u>
CCV										<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 10 172.6, slope from 4 to 7 178.5 (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: 5/5/22

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>Brian Davis</u>	<u>7/6/22</u>	<u>858</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:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 7/6/2022 **Collected By:** Katrin Villinger, Brian Davis
Customer: NE-DIST **Sampling Agency:** FDEP
RQ: RQ-2022-07-04-22 **Project ID:** BMAP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL
FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

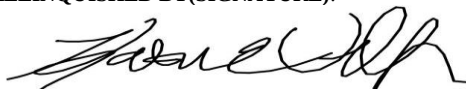
Number of Coolers Shipped: 0

Delivery Method: HandDelivered

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
BUTCHER PEN CR AT WESCONNETT	 20030760
BUTCHER PEN CR @ CONFEDERATE PT ROAD	 20030082
BIG FISHWEIR CR SF @ HAMILTON ST	 20030801
LITTLE FISHWEIR AT OAK ST.	 20030953
BUTCHER PEN CR @ CONFEDERATE PT ROAD	 20030002

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 7/6/2022
1600EST

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:		BUTCHER PEN CR @ CONFEDERATE PT ROAD				Sample Date:		7/6/2022	
WIN / Field ID:	20030082	ORG ID:	21FLA	ENR:	-	Latitude:	30.26461		
County:	DUVAL	WBID:	2322	STREAM		Longitude:	-81.73458		
Receiving Body of Water:		Cedar River				RQ-	2022-07-04-22		

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x Pole	Na
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
	Wading	Canoe/Kayak	
	From Shore	Electric Motor	
x	Bridge	Gasoline Motor	
Depth Measured With		Meter	

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	Rising
High Tide:	NA
Low Tide:	NA
Photos:	No
Meter ID:	Desi

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
EST	1325	0.916	0.3	6.86	96.1	31.7	7.35	0.5	8629	4.76

Biological Samples Collected: None

SBIO Visit ID: HA ID: RPS ID: Macrophyte ID: LIMS Sample ID Entered Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli	Contract Lab	Benchmark	ICE			
Chlorophyll							
Physical/Aggregate Nutrients							
Filtered Nutrients							
Acid Preserved Nutrients							
Metals							
Organics (LC)							
Macroinvertebrates							
Organics (GC)							
Molecular							
Periphyton							
Phytoplankton							
BOD							
Other(s)							
Field Comments:	Partly cloudy						
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.						
Relinquish Date:	07/06/2022	Signature:					

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: BD 07/06/2022 Migrate Data to WIN:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / No

WIN Station Name:		BUTCHER PEN CR AT WESCONNETT				Sample Date:		7/6/2022	
WIN / Field ID:		20030760		ORG ID:	21FLA	ENR:	-	Latitude:	30.25983
County:		DUVAL		WBID:	2322	STREAM		Longitude:	-81.74019
Receiving Body of Water:		Cedar River				RQ-	2022-07-04-22		

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x Pole	Naf
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
	Wading	Canoe/Kayak	
	From Shore	Electric Motor	
x	Bridge	Gasoline Motor	
Depth Measured With		Meter	

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	Slack
High Tide:	NA
Low Tide:	NA
Photos:	No
Meter ID:	Desi

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
EST	1310	0.765	0.3	4.32	53.7	26.7	7.41	0.765 VOB (s)	298.6	0.14

Biological Samples Collected:		None								
SBIO Visit ID:	HA ID:	RPS ID:	Macrophyte ID:	LIMS Sample ID Entered Into The Macrophyte Module:						

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli			ICE			
	Contract Lab	Diversified					
Chlorophyll							
Physical/Aggregate Nutrients							
Filtered Nutrients							
Acid Preserved Nutrients							
Metals							
Organics (LC)							
Macroinvertebrates							
Organics (GC)							
Molecular							
Periphyton							
Phytoplankton							
BOD							
Other(s)							
Field Comments:	Partly cloudy. Nearby homeless camp						
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.						
Relinquish Date:	07/06/2022	Signature:					

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____

Save Field Sheets on Network: BD 07/06/2022 (Initials/Date) Migrate Data to WIN: _____ (Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / No

WIN Station Name:		BIG FISHWEIR CR SF @ HAMILTON ST				Sample Date:		7/6/2022							
WIN / Field ID:		20030801		ORG ID:		21FLA		ENR:		-		Latitude:		30.29315	
County:		DUVAL		WBID:		2280A		STREAM				Longitude:		-81.72209	
Receiving Body of Water:		St Johns River Above Warren Bridge										RQ-		2022-07-04-22	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger		x		x	x
Brian Davis	x		x		

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x	Pole Na
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
	Wading	Canoe/Kayak	
x	From Shore	Electric Motor	
		Gasoline Motor	
Depth Measured With Meter			

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	N/A
High Tide:	
Low Tide:	
Photos:	No
Meter ID:	Desi

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
EST	1345	0.5	0.3	1.34	17.8	28.8	7.1	0.5	5627	3.03
									VOB (s)	

Biological Samples Collected:			None		
SBIO Visit ID:	HA ID:	RPS ID:	Macrophyte ID:	LIMS Sample ID Entered Into The Macrophyte Module:	

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli			ICE			
	Contract Lab	Diversified					
Chlorophyll							
Physical/Aggregate Nutrients							
Filtered Nutrients							
Acid Preserved Nutrients							
Metals							
Organics (LC)							
Macroinvertebrates							
Organics (GC)							
Molecular							
Periphyton							
Phytoplankton							
BOD							
Other(s)							
Field Comments:	Partly cloudy, homeless camp blocking path						
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.						
Relinquish Date:	07/06/2022	Signature:					

LIMS EVENT ID: _____		WIN Import ID: _____	
Enter Field Parameters, Verify Station ID In LIMS DMT: _____ (Initials/Date)		QC Station ID, Field Parameters In LIMS DMT: _____ (Initials/Date)	
Save Field Sheets on Network: BD 07/06/2022 (Initials/Date)		Migrate Data to WIN: _____ (Initials/Date)	



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / No

WIN Station Name:		LITTLE FISHWEIR AT OAK ST.				Sample Date:		7/6/2022	
WIN / Field ID:	20030953	ORG ID:	21FLA	ENR:	-	Latitude:	30.29467		
County:	DUVAL	WBID:	2280A	STREAM		Longitude:	-81.70919		
Receiving Body of Water:		St Johns River Above Warren Bridge				RQ-	2022-07-04-22		

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger		x		x	x
Brian Davis	x		x		

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x Pole	NA
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:		D#3	
Collection Method			
	Wading	Canoe/Kayak	
x	From Shore	Electric Motor	
		Gasoline Motor	
Depth Measured With Meter			

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	Slack
High Tide:	NA
Low Tide:	NA
Photos:	No
Meter ID:	Desi

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
EST	1400	0.7	0.3	3.75	48.2	28.2	7.27	0.7	595	0.29
								VOB (s)		

Biological Samples Collected:		None								
SBIO Visit ID:	HA ID:	RPS ID:	Macrophyte ID:	LIMS Sample ID Entered Into The Macrophyte Module:						

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli			ICE			
	Contract Lab	Diversified					
Chlorophyll							
Physical/Aggregate Nutrients							
Filtered Nutrients							
Acid Preserved Nutrients							
Metals							
Organics (LC)							
Macroinvertebrates							
Organics (GC)							
Molecular							
Periphyton							
Phytoplankton							
BOD							
Other(s)							
Field Comments:							
Comments on COC: Microbiology sample(s) submitted to contract laboratory.							
Relinquish Date:	07/06/2022	Signature:					

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____

Save Field Sheets on Network: BD 07/06/2022 (Initials/Date) Migrate Data to WIN: _____ (Initials/Date)



DIVERSIFIED
ENVIRONMENTAL LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

Project Number:
(Lab Use Only)

3653 Regent Boulevard, Suite
Jacksonville, FL 32224
P. (904) 807-9625 E. info@deliab.com
F. (904) 807-9627

Page 1 of 1

Company Name		Florida Department of Environmental				Container Information (Qty, Size, & Type)		Sample Matrix Codes:	
Address		8800 Baymeadows Way, Suite 100, Protection				850 ml		A. Air P. Petroleum	
City		Jax						B. Bulk S. Soil/Sediment	
Attn.		Jeremy Parrish						W. Wipe O. Other	
Tel.		E-mail or Fax						PW. Potable Water	
Project Name		BMAP 2						NPW. Non-Potable Water	
Project Number		RQ-2022-07-04-22						Sample Kit or Container Lot #	
Project Location									
Sampler Name/Signature		Katrina Villiger							
Transfer #	Sample # (Lab Use Only)	Sample Identification	Date Sampled	Time Sampled	Sample Matrix Code	Comp	Grab	Preservation Codes:	
1	20030760	*	7/6/22	1310	NPW	✓	✓	0. None 5. Na2S2O3	
2	20030082	*	7/6/22	1325	NPW	✓	✓	1. H2SO4 6. Crushed Ice (4C)	
3	20030801		7/6/22	1345	NPW	✓	✓	2. HNO3 7. C6H8O6	
4	20030953	*	7/6/22	1400	NPW	✓	✓	3. HCl 8. NH4Cl	
5								4. NaOH 9. Other: (List)	
6								Thermal Preservation:	
7								In Crushed Ice? Yes / No	
8								Cooler Temp: 0.2 °C	
9								Sample Cont. Temp: 3.4 °C	
10								Turnaround Requested:	
								✓ Standard (10 Business Days)	
								___ Semi-Rush (3-5 Business Days)	
								___ Rush (1-2 Business Days)	
								Turnaround times are estimated & subject to change. Surcharges apply for all Rush samples.	
								Billing Information:	
								Invoice with Report	
								Invoice to Accounting	
								Req. #:	
								P.O. #:	
Special Instructions:		* Please dilute		10X for concentrates				Relinquished By	
								Date / Time	
								Received By	
								Date / Time	
								7/6/22 14:40	
								Negen/Dove	
								7/6/22 14:41	



Certification #E821059