

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: Pro DSS Desi

RQ: 2019-09-30-11

Project: Interlachen 2

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 7/2019

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.	K. Appleby	10/3/19	739	22.4	761.3	8.7	8.69	100.2	-	-	P/F	F
ICV	↓	↓	741	22.5	761.4	8.7	8.69	100.3	-	-	P/F	F
CCV	↓	10/3/19	1600	25.3	760.9	8.2	8.25	100.3	-	-	P/F	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.	K. Appleby	10/3/19	741	190711B	7/2020	1000	1000	P/F	F
ICV	↓	↓	745	190711A	7/2020	100	104.2	P/F	F
CCV	↓	↓	1604	190711B	7/2020	1000	1000	P/F	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.	K. Appleby	10/3/19	748	2902778	1/2021	7.00	23.4	7.00	-29.8	P/F	F
Calibr.	↓	↓	751	2904800	3/2021	4.00	23.6	4.00	152.5	P/F	F
Calibr.	↓	↓	755	2810F55	4/2020	10.00	23.6	10.00	-199.6	P/F	F
ICV	↓	↓	757	2904800	3/2021	4.00	23.6	4.397	152.6	P/F	F
CCV	↓	↓	1606	2902778	1/2021	7.00	24.1	7.06	-28.7	P/F	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: 7/2019

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	K. Appleby	10/3/19	800	0.00	0.00	P/F	F

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 STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: LAKE FANNY CENTER

Date: 10/03/2019

(mm/dd/yyyy)

WIN/ Field ID: 20020100

WBID: 2732X

Latitude: 29.6057

(Decimal Degrees)

County: Putnam

ORG ID: 21FLA

Longitude: -81.98300

(Decimal Degrees)

Receiving Body of Water: Higgin Botham Lake Outlet

RQ-2019- 09-30-11

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Kim Appleby Amy Kalmbacher						X	X	X	X	X	☒ Sample Container ☐ Van Dorn ☐ Pole ☐ Carboy ☐ Syringe ☐ Dipper ☐ Other Depth Measured with <u>meter</u> Equipment ID <u>Ortho Kit 44</u>				
											Collection Method ☐ Wading ☒ Canoe/Kayak ☐ From Shore ☐ Electric Motor ☐ Other ☐ Gasoline Motor				
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded						Meter ID# <u>Pro DSS</u>					Matrix: <u>Fresh</u> Marine / DI				
Photos: Yes / <u>No</u>		Flow: No Flow / Intestinal / Flowing <u>NA</u>				Tide: Rising/ Falling/ Slack/ NA					Tide Times: High Low				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)					
<u>EST</u>	<u>1225</u>	<u>4.9</u>	<u>0.3</u>	<u>2.6</u>	<u>6.45</u>	<u>83</u>	<u>3.78</u>	<u>0.03</u>	<u>68</u>	<u>29.0</u>					
CEN	<u>1228</u>		<u>4.5</u>		<u>0.29</u>	<u>4</u>	<u>5.18</u>	<u>0.03</u>	<u>66</u>	<u>28.0</u>					
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS LVI Other:															
SBIO ID Numbers:		SBIO-ID:		HA-ID:		RPS-ID:		Macrophyte-ID:				LIMS#:			
Parameter Suite		Parameter Methods				Preservation		Lot#		Expiration		pH Check			
Preserved Nutrients		☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP				☒ Ice ☐ H2SO4		<u>SA9129100</u>		<u>5/2020</u>		☐ <2			
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3						☐ <2			
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice		<u>R981805</u>							
Chlorophyll		☒ CHLSUITE-W				☒ Ice									
Physical/Aggregate (Fresh)		☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CI-IC / ☒ W-COLOR / ☒ W-SO4-IC / ☒ W-TDS				☒ Ice									
Physical/Aggregate (Marine)		☐ Alkalinity / ☐ W-BR-IC / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY				☐ Ice									
Macroinvertebrates		☐ MI-FW-QLDC				☐ Formalin									
Periphyton		☐ ALGAE-ID				☐ Ice									
Microbiology		☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice									
Molecular		☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD				☐ Ice									
Tracers		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice									
Pesticides		☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☐ Ice									
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C				☐ Ice									

Notes:

WIN ID/Field ID:



20020100

LAKE FANNY CENTER

Signature:

[Handwritten Signature]

Date:

10-3-2019

LIMS EVENT ID:

WIN Import ID:

Enter Field Parameters, Verify Station ID in LIMS DMT:

QC Station ID, Field Parameters in LIMS DMT:

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data in WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Gillis Pond Center

Date: 10/03/2019

(mm/dd/yyyy)

WIN/ Field ID: G1NE0863

WBID: 2732Y

Latitude: 29.56712

(Decimal Degrees)

County: Putnam

ORG ID: 21FLA

Longitude: 81.98366

(Decimal Degrees)

Receiving Body of Water: Higgin Botham Lake Outlet

RQ-2019- 09-30-11

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
<u>Amy Kalmbacher</u> <u>Kim Appleby</u>				☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☒ Pole	
									☐ Carboy	☐ Syringe		
									☐ Dipper	☐ Other		
Depth Measured with <u>ortho K.T #44</u>								Equipment ID <u>DSS</u>				
Collection Method												
				☐ Wading			☐ Canoe/Kayak					
				☐ From Shore			☐ Electric Motor					
				☒ Other <u>DOLK</u>			☐ Gasoline Motor					
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded				Meter ID# <u>Pro DSS DSS</u>				Matrix: <u>Fresh</u> / Marine / DI				
Photos: Yes / <u>No</u>		Flow: <u>No Flow</u> / Intertidal / Flowing <u>NA</u>		Tide: Rising/ Falling/ Slack/ <u>NA</u>				Tide Times: High Low				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (umhos/cm)	Temp. (C°)		
<u>EST</u>	<u>1310</u>	<u>1.261</u>	<u>0.3</u>	<u>1.0</u>	<u>4.89</u>	<u>64.7</u>	<u>4.18</u>	<u>0.03</u>	<u>68.8</u>	<u>29.1</u>		
<u>CEN</u>					<u>5.30</u>	<u>69.3</u>						
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS LVI Other:												
SBIO ID Numbers:		SBIO-ID:		HA-ID:		RPS-ID:		Macrophyte-ID:		LIMS#:		
Parameter Suite		Parameter Methods				Preservation		Lot#	Expiration	pH Check		
Preserved Nutrients		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4		<u>SA9010030</u>	<u>4/2020</u>	☒ <2		
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3				☐ <2		
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice		<u>R9BA8682</u>				
Chlorophyll		☒ CHL-SUITE-W				☒ Ice						
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice						
Physical/Aggregate (Marine)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice						
Macroinvertebrates		☐ MI-FW-QLDC				☐ Formalin						
Periphyton		☐ ALGAE-ID				☐ Ice						
Microbiology		☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice						
Molecular		☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD				☐ Ice						
Tracers		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice						
Pesticides		☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☐ Ice						
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C				☐ Ice						

Notes:

WIN ID/Field ID:



G1NE0863

Gillis Pond Center

Signature:

[Handwritten Signature]

Date:

10/3/2019

LIMS EVENT ID:

WIN Import ID:

Enter Field Parameters, Verify Station ID in LIMS DMT:

QC Station ID, Field Parameters in LIMS DMT:

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data in WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Hardesty lake Center

Date: 10/03/2019

(mm/dd/yyyy)

WIN/ Field ID: G1NE0869

WBID: 2716X

Latitude: 29.60236

(Decimal Degrees)

County: Putnam

ORG ID: 21FLA

Longitude: -81.8555

(Decimal Degrees)

Receiving Body of Water: Alligator Creek

RQ-2019- 09-30-11

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment									
K. Appleby Amy Kalmbacher						☒	☒	☒	☒	☒	☒ Sample Container ☐ Van Dorn ☐ Pole ☐ Carboy ☒ confirmed Syringe ☐ Dipper cab 11/4/19 Other _____ Depth Measured with <u>water</u> Equipment ID <u>Ortho 1444</u>									
											Collection Method ☐ Wading ☒ Canoe/Kayak ☐ From Shore ☐ Electric Motor ☐ Other ☐ Gasoline Motor									
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded						Meter ID# <u>Pro DSS Desi</u>					Matrix: <u>Fresh</u> / Marine / DI									
Photos: Yes / <u>No</u>						Flow: No Flow / Intestinal / Flowing <u>NA</u>					Tide: Rising/ Falling/ Slack <u>NA</u>					Tide Times: High Low				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)										
EST	1040	3.5	0.3	0.9	5.2	67	5.15	0.02	43.2	28.2										
CEN	1043		3.0		0.02	0.3	5.63	0.5	101.4	25.6										
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS LVI Other:																				
SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:																				
Parameter Suite		Parameter Methods				Preservation		Lot#		Expiration		pH Check								
Preserved Nutrients		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4						☐ <2								
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3						☐ <2								
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 um Filter				☒ Ice														
Chlorophyll		☐ CHLSUITE-W				☐ Ice														
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice														
Physical/Aggregate (Marine)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice														
Macroinvertebrates		☐ MI-FW-QLDC				☐ Formalin														
Periphyton		☐ ALGAE-ID				☐ Ice														
Microbiology		☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice														
Molecular		☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD				☐ Ice														
Tracers		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice														
Pesticides		☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☐ Ice														
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C				☐ Ice														
Notes:																				
WIN ID/Field ID:  G1NE0869																				
Hardesty Lake Center																				
Signature: <u>A. Kalmbacher</u> Date: <u>10-3-2019</u>																				

LIMS EVENT ID:

WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT:

QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

Florida Department of Environmental Protection Central Laboratory Submittal Form

Customer: NE-DIST

Project ID: SMP

Requester: Jeremy M. Parrish

Field Report Prepared By:

A. Kalmbacher

Collected By:

K. Appleby

Sampling Agency:

FDEP/NE ROC

WIN ID/Field ID:



20020100

LAKE FANNY CENTER

Latitude

☐ dd

Longitude

☐ dms

WIN ID/Field ID:



G1NE0863

Gillis Pond Center

Latitude

☐ dd

Longitude

☐ dms

WIN ID/Field ID:



G1NE0869

Hardesty Lake Center

Latitude

☐ dd

Longitude

☐ dms

☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10-3-2019</u> Time <u>1310</u>	<u>Eastern</u> Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2) <u>A</u>		
Matrix (type, e.g., Salt, <u>Fresh</u> , etc)		Diss. Oxygen <u>6.45</u> 5.45 ☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
Temp (C) <u>29.0</u>	pH <u>4.18</u>	Sample Depth <u>0.3</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) _____			
Salinity (ppt) <u>0.03</u> Comments _____						
☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10-3-2019</u> Time <u>1310</u>	<u>Eastern</u> Central	Composite end Date _____ Time _____	Bottle Group(s) <u>A</u>		
Matrix (type, e.g., Salt, <u>Fresh</u> , etc)		Diss. Oxygen <u>5.3</u> ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
Temp (C) <u>29.1</u>	pH <u>4.18</u>	Sample Depth <u>0.3</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) <u>68.8</u>			
Salinity (ppt) <u>0.03</u> Comments _____						
☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10-3-2019</u> Time <u>1040</u>	<u>Eastern</u> Central	Composite end Date _____ Time _____	Bottle Group(s) <u>A</u>		
Matrix (type, e.g., Salt, <u>Fresh</u> , etc)		Diss. Oxygen <u>5.2</u> ☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
Temp (C) <u>28.2</u>	pH <u>5.15</u>	Sample Depth <u>0.3</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) <u>43.2</u>			
Salinity (ppt) <u>0.02</u> Comments _____						
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	<u>Eastern</u> 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)		

Relinquished By:

Date/Time

10-3-2019

Shipping Method

FedEx

Number of Coolers Shipped:

2

Received By:

Date/Time

Group: A	Bottle Type:	P-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 4	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	3
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 4	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	3
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	0
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						

Group: B Bottle Type: P-125ML # of Bottles: 1 Preservative: FILTER-ICE Enter Number of Bottles Sent to Lab 0

W-PO4-F