



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 9

Data Qualified?
Yes / No

pH

Location/STORET Station Name: Pine Hill Lake Middle

Date: 9/5/2017

(mm/dd/yyyy)

STORET # G1WA0054

WBID: 564B

Latitude: 30.58492

(Decimal Degrees)

County: Leon

RQ - 2017-09-04-23

ORG ID: 21FLWQA

Longitude: -84.2195

(Decimal Degrees)

Receiving Body of Water: Lake Iamonia

Field ID: G1WA0054_09052017

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Curtis Musson			X		X	X	X	X
Ben Ralys		X		X				X

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Equipment ID		

Collection Method	
☐ Wading	☐ Via Boat
☐ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☒ Electric Motor
	☐ Gasoline Motor

Water Level: Dry / Pooled / Low / <u>Normal</u> / High / Flooded	Matrix: <u>Fresh</u> / Marine / DI
Meter ID# Biology #2	Photos: Yes / No
	Tide Falling: Yes / No / <u>NA</u>

Field Sample

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
<u>EST</u>	8:44	0.3	1.7	7.79	102.6	8.02	0.02	1.1	44	29.80
CEN	8:47	1.2		7.71	101.4	7.72	0.02		44	29.73

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other

SBIO ID Numbers: SBIO-ID: RPS-ID: Macrophyte-ID: LIMBS#:

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA7163030	6/12/18	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-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-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☒ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

SULFURIC ACID >51%
DANGER
7054-93-9
7732-18-5

Contains 1.1 Sulfuric Acid
Lot No: SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

Contains 1.1 Sulfuric Acid
Lot No: SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

QA/QC Sample Information

Duplicate

Time Zone: <u>EST</u> CEN		Sample Depth (m): <u>0.3</u>		Field ID: <u>G1WA0054_09052017D</u>	
Time: <u>8:59</u>		Total Depth (m): <u>1.7</u>			
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H ₂ SO ₄	<u>SA7163030</u>	<u>6/12/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☐ Ice			
Chlorophyll	☒ CHLSUITE-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-F / W-TSS / TURBIDITY	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ Pine Hill Lake Middle				

Blank QC-DUP

STORET ↓

G1WA0054

Field ID → Pine Hill Lake Middle

QC-DUF June 20, 2017

G1WA0054_09052017D

Time Zone: <u>EST</u> CEN		Time: <u>8:23</u>		Field ID: <u>G1WA0054_09052017B</u>		Location: <u>Perry 245 Boat Launch</u>	
☒ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipment ID					
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check		
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H ₂ SO ₄	<u>SA7163030</u>	<u>6/12/18</u>	☒ <2		
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <2		
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice					
Chlorophyll	☒ CHLSUITE-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-F / W-TSS / TURBIDITY	☐ Ice					
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice					
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice					
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other					

Notes:		Field ID →	
QC - BLANK DI WATER		QC - BLANK DI WATER	
		June 20, 2017	
Signature: <u>[Signature]</u>		Date: <u>9-5-17</u>	

Field Parameters Entered into LIMS: <u>Cm 9-8-17</u>	Field Parameters QC in LIMS: _____
(Initials/Date)	(Initials/Date)
Date Migrated to STORIT: _____	Field Sheets Scanned/Saved: _____
(Initials/Date)	(Initials/Date)

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there is qualified data on this page.

PH

Meter Biology #2

RQ- 2017-09-04-23

Project SMP

- Notes:** (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site _____

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 03/06/2017

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	9/5/17	712	22.20	8.744	8.71	100.0	54	—	P	Lab
ICV	Curtis Musson	9/5/17	716	22.51	8.660	8.84	102.1	53	—	P	Lab
CCV	Curtis Musson	9/5/17	1618	22.99	8.578	8.70	101.4	52	—	Pass	Lab
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

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; 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.	Curtis Musson	9/5/17	714	170310D	3/2018	1000	1000	P	Lab
ICV	Curtis Musson	9/5/17	715	170310D	3/2018	1000	1000	P	Lab
CCV	Curtis Musson	9/5/17	1619	170614D	6-2018	100	104	P	Lab
CCV									

Report specific conductance as a whole number with no decimal figure.

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	9/5/17	717	170310B	9/2018	7.0	7.00	32	Pass	Lab
Calibr.	Curtis Musson	9/5/17	719	170614A	6/2018	4.01	3.99	187	Pass	Lab
Calibr.	Curtis Musson	9/5/17	721	170310C	9/2018	10.01	10.01	-119	Pass	Lab
ICV	Curtis Musson	9/5/17	723	170614A	6/2018	4.01	4.01	211	Pass	Lab
CCV	Curtis Musson	9/5/17	1620	170310C	9/2018	10.01	10.67	-128	Fail	Lab
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification _____

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

Request Number: 2017-09-04-23

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Lab Sample Submittal Form

Page 1 of 4

Monkey Business, Lake Tom John, Petty Gulf Lake

Requester: Curtis Musson

Field Report Prepared By: Curtis Musson

Customer: WAS-SECT

Sampling Agency: FDEP

Project ID: SMP

Collected By: C. Musson, B. Ralls

Location

Lake Monkey
Business
Middle

STORET ↓



G1WA0036

Field ID →

Lake
Monkey
Business
Middle

Sept 5, 2017



G1WA0036_09052017

☐ Comp
☒ Grab

Collection (comp begin or grab)

Date 9-5-2017 Time 1055

☒ Eastern
☐ Central

Collection (comp begin or grab)

Date / Time /

Bottle
Group(s)

Matrix (Salt, Fresh)

Fresh

Diss. Oxygen
(mg/L)

9.33

Temp
(C)

29.85

pH

9.47

Sample Depts
(m)

0.3

Sp. Conductance
(umho/cm)

78

A, B

Salinity
(ppt)

0.03

Comments

Latitude (Decimal Degrees)

30.60779

Longitude (Decimal Degrees)

-84.23076

Location

Lake Tom
John Middle

STORET ↓



G1WA0043

Field ID →

Lake Tom
John Middle

Sept 5, 2017



G1WA0043_09052017

☐ Comp
☒ Grab

Collection (comp begin or grab)

Date 9-5-17 Time 1235

☒ Eastern
☐ Central

Collection (comp begin or grab)

Date / Time /

Bottle
Group(s)

Matrix (Salt, Fresh)

Fresh

Diss. Oxygen
(mg/L)

8.82

Temp
(C)

30.36

pH

7.99

Sample Depts
(m)

0.3

Sp. Conductance
(umho/cm)

67

A, B

Salinity
(ppt)

0.03

Comments

Latitude (Decimal Degrees)

30.54484

Longitude (Decimal Degrees)

-84.21478

Location

Pine Hill
Lake Middle

STORET ↓

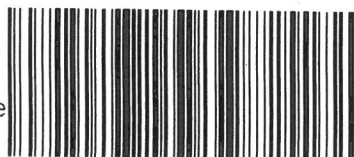


G1WA0054

Field ID →

Pine Hill
Lake Middle

Sept 5, 2017



G1WA0054_09052017

☐ Comp
☒ Grab

Collection (comp begin or grab)

Date 9-5-17 Time 844

☒ Eastern
☐ Central

Collection (comp begin or grab)

Date / Time /

Bottle
Group(s)

Matrix (Salt, Fresh)

Fresh

Diss. Oxygen
(mg/L)

7.79

Temp
(C)

29.80

pH

8.02

Sample Depts
(m)

0.3

Sp. Conductance
(umho/cm)

44

A, B

Salinity
(ppt)

0.02

Comments

Latitude (Decimal Degrees)

30.58492

Longitude (Decimal Degrees)

-84.2195

Relinquished By:

Curtis Musson

Date/Time

9-5-17 / 1307

Number of Coolers

3

Received By:

SR

Date/Time

9-5-17 / 1:33

Request Number: 2017-09-04-23

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Page 2 of 4

Monkey Business, Lake Tom John, Petty Gulf Lake

Requester: Curtis Musson

Field Report Prepared By: CURTIS MUSSON

Customer: WAS-SECT

Sampling Agency: FDEP

Project ID: SMP

Collected By: C. Musson, B. Laiks

Location

Petty Gulf
Lake Middle

STORET ↓



G1WA0022

Field ID →

Petty Gulf
Lake Middle

Sept 5, 2017



G1WA0022_09052017

☐ Comp
☒ Grab

Collection (comp begin or grab)

Date 9/5/17 Time 958

Eastern
Central

Collection (comp begin or grab)

Date / Time /

Bottle
Group(s)

Matrix (Salt, Fresh)

Fresh

Diss. Oxygen
(mg/L)

7.80

Temp

(C)

29.53

pH

8.04

Sample Depts

(m)

0.3

Sp. Conductance

(umho/cm)

57

Salinity

(ppt)

0.03

Comments

Latitude (Decimal Degrees)

30.58915

Longitude (Decimal Degrees)

-84.22637

A, B

Location

Lower Dianne
Lake Middle

STORET ↓



G1WA0040

Field ID →

Lower Dianne
Lake Middle

Sept. 5, 2017



G1WA0040_09052017

☐ Comp
☒ Grab

Collection (comp begin or grab)

Date 9/5/17 Time 933

Eastern
Central

Collection (comp begin or grab)

Date / Time /

Bottle
Group(s)

Matrix (Salt, Fresh)

Fresh

Diss. Oxygen
(mg/L)

8.40

Temp

(C)

29.64

pH

8.94

Sample Depts

(m)

0.3

Sp. Conductance

(umho/cm)

85

Salinity

(ppt)

0.04

Comments

Latitude (Decimal Degrees)

30.59355

Longitude (Decimal Degrees)

-84.23534

A, B

Location

Upper Dianne
Lake Middle

STORET ↓



G1WA0041

Field ID →

Upper Dianne
Lake Middle

Sept. 5, 2017



G1WA0041_09052017

☐ Comp
☒ Grab

Collection (comp begin or grab)

Date 9-5-17 Time 1125

Eastern
Central

Collection (comp begin or grab)

Date / Time /

Bottle
Group(s)

Matrix (Salt, Fresh)

Fresh

Diss. Oxygen
(mg/L)

8.73

Temp

(C)

29.86

pH

8.93

Sample Depts

(m)

0.3

Sp. Conductance

(umho/cm)

81

Salinity

(ppt)

0.04

Comments

Latitude (Decimal Degrees)

30.59986

Longitude (Decimal Degrees)

-84.23778

Relinquished By:

CURTIS MUSSON

Date/Time

9-5-17 / 1307

Number of Coolers

3

Received By:

SR

Date/Time

9-5-17 / 1:33

Request Number: 2017-09-04-23

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Lab Sample Submittal Form

Page 3 of 4

Monkey Business, Lake Tom John, Petty Gulf Lake

Requester: Curtis Musson

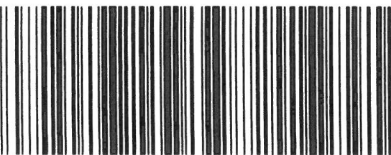
Field Report Prepared By: CURTIS MUSSON

Customer: WAS-SECT

Sampling Agency: FDEP

Project ID: SMP

Collected By: Co Musson, B. Laix

Pine Hill Lake Middle QC - DUP Field ID → Pine Hill Lake Middle QC-DUP June 20, 2017 		STORET ↓ 		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 9-5-17 Time 8:44 Eastern Central	Collection (comp begin or grab) Date / Time /	Bottle Group(s) A
Matrix (Salt, Fresh) Fresh		Diss. Oxygen (mg/L) 7.79					
Temp (C) 29.80		pH 8.02		Sample Depts (m) 0.3			
Salinity (ppt) 0.02		Comments QC-DUP		Sp. Conductance (umho/cm) 44			
Latitude (Decimal Degrees) 30.58492				Longitude (Decimal Degrees) -84.2195			
QC - BLANK DI WATER Field ID → QC - BLANK DI WATER June 20, 2017 		STORET ↓ 		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8:29/5/17 Time 8:23 Eastern Central	Collection (comp begin or grab) Date / Time /	Bottle Group(s) A
Matrix (Salt, Fresh) DI Water		Diss. Oxygen (mg/L) —					
Temp (C) —		pH —		Sample Depts (m) —			
Salinity (ppt) —		Comments QC-Blank		Sp. Conductance (umho/cm) —			
Latitude (Decimal Degrees) —				Longitude (Decimal Degrees) —			
Location Field ID STORET #		☐ Comp ☐ Grab	Collection (comp begin or grab) Date / Time / Eastern Central	Collection (comp begin or grab) Date / Time /	Bottle Group(s)		
Matrix (Salt, Fresh)		Diss. Oxygen (mg/L)					
Temp (C)		pH		Sample Depts (m)			
Salinity (ppt)		Comments		Sp. Conductance (umho/cm)			
Latitude (Decimal Degrees)				Longitude (Decimal Degrees)			

Relinquished By:

CURTIS MUSSON

Date/Time

9-5-17/1307

Number of Coolers

3

Received By:

SR

Date/Time

9-5-17/1:33

Group: A	Bottle Type:	P-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	ALKALINITY					8 of 8
	TURBIDITY					
	W-CL-IC					
	W-COLOR					
	W-F					
	W-SO4-IC					
	W-TDS					
	W-TSS					
Group: A	Bottle Type:	BP-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	CHLSUITE-W					8 of 8
Group: A	Bottle Type:	P-500ML	# of Bottles: 8	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3					8 of 8
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					
Group: A	Bottle Type:	P-125ML	# of Bottles: 8	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab
	W-PO4-F					8 of 8
Group: B	Bottle Type:	P-250ML-WO-THI	# of Bottles: 6	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	ECOLI-18QT					6 of 6

Thanks!

Cooler Packing Worksheet for Request: RQ-2017-09-04-23

NE Tallahassee Lakes

Ship Cooler On: 8/25/2017

Customer/Project: WAS-SECT/SMP

Assigned To: GREENWOO_J

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Freshwater Kit, No Metals

Group B: ECOLI

Packing Notes

4 L DI water for blank sample ✓

No FedEx labels

Requested Analyses:

Bottle Group: A

of Sites: 8

Container ID: P-1L

Qty: 8 Preservation: ICE

Lot # 0008075

Description: Plastic Bottle 1L

Analysis

ALKALINITY
TURBIDITY
W-CL-IC
W-COLOR
W-F
W-SO4-IC
W-TDS
W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L
Turbidity in aqueous matrices
Chloride in aqueous matrices
True Color measured at 450 nm
Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Sulfate in aqueous matrices
Total Dissolved Solids in aqueous matrices
Total Suspended Solids in aqueous matrices

Container ID: BP-1L

Qty: 8 Preservation: ICE

Lot # 1204344

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: P-500ML

Qty: 8 Preservation: ICE And H2SO4

Lot # 000608654

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH3
W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

Description

Ammonia in aqueous matrices as mg N/L
Nitrite/Nitrate in aqueous matrices as mg N/L
Total Phosphorus in aqueous matrices as mg P/L
Total Kjeldahl Nitrogen in aqueous matrices
Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML

Qty: 8 Preservation: ICE-FLTR

Lot # 00067000

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group: B

of Sites: 6

Container ID: P-250ML-WO-THI

Qty: 6 Preservation: ICE

Lot # L17048

Description:

Analysis

ECOLI-18QT

Description

Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

Cooler Packed By: J.2

Number of Coolers: 3

Date: 8/23/17

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☐ FedEx Bills, if applicable
- ☒ Plastic Bags
- ☒ Zip Ties

If Preservation Included:

ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2017-09-04-23