



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 8

Data Qualified?

Yes / No

PH

Location/STORET Station Name: Eight Mile Pond Middle

Date: 9/20/2017

(mm/dd/yyyy)

STORET # G1WA0024

WBID: 807A

Latitude: 30.32635

(Decimal Degrees)

County: Leon

RQ - 2017-09-18-25

ORG ID: 21FLWQA

Longitude: -84.30273

(Decimal Degrees)

Receiving Body of Water: Munson Slough

Field ID: G1WA0024_9202017

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson					X	X	X	X
Ben Ralys					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 / <u>No</u>						
				Tide Falling: Yes / No / <u>NA</u>						
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>	9:38	0.3	0.6	3.40	42.2	7.45	0.04	VOB	88	26.66
CEN										

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

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

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	7163030	6/12/18	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-P04-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
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-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	☐ Ice			
	☐ W-PCP-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other			

SULFURIC ACID >51%
DANGER
7566-81-8
7732-18-9
Contains 1:1 Sulfuric Acid

THERMO FISHER SCIENTIFIC
520 NORTH MAIN STREET
MIAMI, OK 74354
1-800-456-2711

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/mist/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Store in corrosion resistant container with a resistant inner liner.

Contains 1:1 Sulfuric Acid
Lot No.: SAV163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

Notes:

1-Kit A, Bacteria
Tracers and PCR-HF183

PCR-Filter

Eight Mile
Pond Middle

STORET ↓



G1WA0024

Field ID →
Eight Mile
Pond
Middle:

Sept 20, 2017



G1WA0024_09202017

Signature:

Date: 9-20-2017

Field Parameters Entered into LIMS: DT 9/21/17

(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved: DT 9/21/17

(Initials/Date)

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

Meter Bio #2

RQ- 2017-08-07-20

Project SMP

~~Handwritten "X" this box if there is qualified data on this name~~

pH

- 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	9/19/17	1622	22.8	8.611	8.61	100.0	53	—	PASS	LAB
ICV	Curtis Musson	9-19-17	1623	22.77	8.611	8.62	100.0	52	—	PASS	LAB
CCV	Curtis Musson	9-20-17	1307	26.22	8.084	8.12	100.5	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 $\mu\text{mhos/cm}$	Meter Reading $\mu\text{mhos/cm}$	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	9/19/17	1625	170310D	3/2018	1000	1000	PASS	LAB
ICV	Curtis Musson	9/19/17	1626	170310D	3/2018	1000	1000	PASS	LAB
CCV	Curtis Musson	9/20/17	1309	170614D	6/2018	100	104	PASS	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	9/19/17	1627	170310B	9/2018	7.0	7.00	34	PASS	LAB
Calibr.	Curtis Musson	9/19/17	1629	170614A	6/2018	4.01	4.01	206	PASS	LAB
Calibr.	Curtis Musson	9/19/17	1631	120310C	9/18	10.01	9.93	-116	PASS	LAB
ICV	Curtis Musson	9/19/17	1633	170614A	6/2018	4.01	3.81	213	PASS	LAB
CCV	Curtis Musson	9/20/17	1311	170614A	6/2018	4.01	3.86	211	PASS	LAB
CCV	Curtis Musson	9/20/17	1312	170310C	9/2018	10.01	9.50	—	PASS	LAB

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

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

mV pH 10 Range -180 ± 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 $\pm 0.05\text{m}$, whichever is greater

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Lab Sample Submittal Form

Request Number: 2017-09-18-25
 Sand Pond, Sally Ward Spring, Eight Mile Pond
 Customer: WAS-SECT
 Project ID: SMP

Requester: Curtis Musson

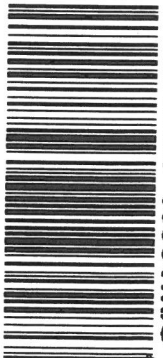
Collected By: Curtis Musson Ben Ralys

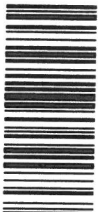
Field Report Prepared By: Ben Ralys
 Sampling Agency: FDEP

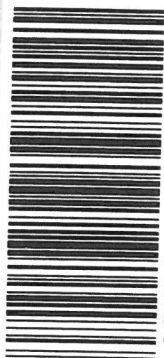
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Black Creek
 upstream of
 Bloxham Cutoff
 STORET ↓

 G1WA0023

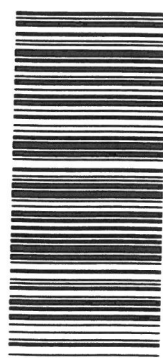
Field ID →
 Black Creek
 upstream of
 Bloxham Cutoff
 Sept 20, 2017

 G1WA0023_00002017

Sand Pond
 Middle
 STORET ↓

 G1WA0044

Field ID →
 Sand Pond
 Middle
 Sept 20, 2017

 G1WA0044_00202017

Sally Ward Spring
 at Wakulla Park Dr.
 STORET ↓

 G1WA0021

Field ID →
 Sally Ward
 Spring at
 Wakulla
 Park Dr
 Sept 20, 2017

 G1WA0021_00202017

Comp	Grab	Collection (comp begin or grab)	Date	Time	Collection (comp begin or grab)	Date	Time	Bottle Group(s)
☒	☐	Matrix (Salt, <u>fresh</u>)	9/20/17	8:30	Matrix (Salt, <u>fresh</u>)	9/20/17	8:30	A
		Diss. Oxygen (mg/L)		6.13	Diss. Oxygen (mg/L)		6.13	
		pH		4.61	pH		4.61	
		Temp (C)		23.65	Temp (C)		23.65	
		Salinity (ppt)		0.03	Salinity (ppt)		0.03	
		Sample Depts (m)			Sample Depts (m)			
		Sp. Conductance (umho/cm)			Sp. Conductance (umho/cm)		57	
		Latitude (Decimal Degrees)			Latitude (Decimal Degrees)			
		Longitude (Decimal Degrees)			Longitude (Decimal Degrees)		-84.3858	
☒	☐	Matrix (Salt, <u>fresh</u>)	9/20/17	7:50	Matrix (Salt, <u>fresh</u>)	9/20/17	7:50	A
		Diss. Oxygen (mg/L)		7.00	Diss. Oxygen (mg/L)		7.00	
		pH		5.81	pH		5.81	
		Temp (C)		27.29	Temp (C)		27.29	
		Salinity (ppt)		0.01	Salinity (ppt)		0.01	
		Sample Depts (m)			Sample Depts (m)		0.3	
		Sp. Conductance (umho/cm)			Sp. Conductance (umho/cm)		13	
		Latitude (Decimal Degrees)			Latitude (Decimal Degrees)			
		Longitude (Decimal Degrees)			Longitude (Decimal Degrees)		-84.387	
☒	☐	Matrix (Salt, <u>fresh</u>)	9/20/17	7:50	Matrix (Salt, <u>fresh</u>)	9/20/17	7:50	A
		Diss. Oxygen (mg/L)		7.80	Diss. Oxygen (mg/L)		7.80	
		pH		7.50	pH		7.50	
		Temp (C)		20.78	Temp (C)		20.78	
		Salinity (ppt)		0.16	Salinity (ppt)		0.16	
		Sample Depts (m)			Sample Depts (m)		0.3	
		Sp. Conductance (umho/cm)			Sp. Conductance (umho/cm)		341	
		Latitude (Decimal Degrees)			Latitude (Decimal Degrees)			
		Longitude (Decimal Degrees)			Longitude (Decimal Degrees)		-84.3109	

Relinquished By: Curtis Musson	Date/Time: 9-20-2017 / 12:25	Number of Coolers: 3	Received By: SR	Date/Time: 9-20-2017 / 12:48
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION Central Lab Sample Submittal Form

Request Number: 2017-09-18-25

Sand Pond, Sally Ward Spring, Eight Mile Pond

Customer: WAS-SECT

Project ID: SMP

Requester: Curtis Musson

Collected By: Curtis Musson Benkals

Field Report Prepared By: Ben Benkals

Sampling Agency: FDEP

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STORET ↓

**Eight Mile
Pond Middle**

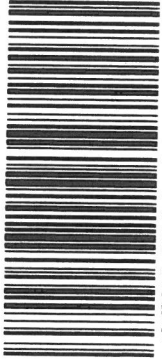


GIWA0024

Field ID →

Eight Mile
Pond
Middle

Sept 20, 2017



GIWA0024_00202017

Location

Scappstone Branch

100 meters upstream

GPS 376

Field ID →

Scappstone Branch
100 meters upstream
GPS 376

STORET ↓

**Chicken Branch
at Old Plank Rd**

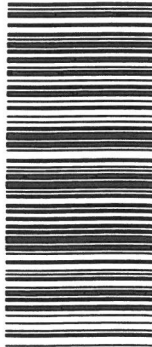


GIWA0031

Field ID →

Chicken
Branch a
Old Plank Rd

Sept 20, 2017



GIWA0031_00202017

Relinquished By:

Curtis Musson

Date/Time

9-20-2017 / 12:25

Number of Coolers

3

Received By:

SR

Date/Time

9-20-17 / 12:48

Collection (comp begin or grab)		Collection (comp begin or grab)		Collection (comp begin or grab)	
Comp	Grab	Date	Time	Date	Time
☐	☒	9/20/17	9:38		
Matrix (Salt, <u>Fresh</u>)		Diss. Oxygen (mg/L) <u>3.40</u>		Sample Depts (m) <u>0.3</u>	
Temp (C) <u>26.66</u>		pH <u>7.45</u>		Sp. Conductance (umho/cm) <u>88</u>	
Salinity (ppt) <u>0.04</u>		Comments			
Latitude (Decimal Degrees) <u>30.32635</u>		Longitude (Decimal Degrees) <u>-84.30273</u>			
NOT Collected					
Collection (comp begin or grab)		Collection (comp begin or grab)		Collection (comp begin or grab)	
Comp	Grab	Date	Time	Date	Time
☐	☒	9/20/17			
Matrix (Salt, <u>Fresh</u>)		Diss. Oxygen (mg/L) <u>2.30</u>		Sample Depts (m) <u>0.3</u>	
Temp (C) <u>23.30</u>		pH <u>7.02</u>		Sp. Conductance (umho/cm) <u>298</u>	
Salinity (ppt) <u>0.14</u>		Comments			
Latitude (Decimal Degrees) <u>30.3261</u>		Longitude (Decimal Degrees) <u>-84.1481</u>			

Bottle Group(s)

A,C
D,E

Bottle Group(s)

Bottle Group(s)

A,C
D,E

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Request Number: 2017-09-18-25
 Sand Pond, Sally Ward Spring, Eight Mile Pond
 Customer: WAS-SECT
 Project ID: SMP

Requester: Curtis Musson

Collected By: Curtis Musson, Ben Ralys

Field Report Prepared By: Ben Ralys
 Sampling Agency: FDEP

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Lake Lafayette Drain STORET ↓
 250 meters
 downstream of
 Weems Rd
 G1WA0007

Field ID →
 Lake Lafayette
 Drain 250 meters
 downstream of
 Weems Rd
 Sept 20, 2017 G1WA0007_00202017

Godby Drainage STORET ↓
 Ditch at
 Progress Dr.
 G1WA0001

Field ID →
 Godby Drainage
 Ditch at
 Progress Dr.
 Sept 20, 2017 G1WA0001_00202017

Collection (comp begin or grab)		Date		Time		Bottle Group(s)	
☐ Comp	☒ Grab	9/20/17	12:05	6:95	7:43	0.3	A, B C, D F
Matrix (Salt, Fresh)		Diss. Oxygen (mg/L)		pH		Sp. Conductance (umho/cm)	
Fresh		6.95		7.43		100	
Temp (C)		26.79		Salinity (ppt)		0.05	
Latitude (Decimal Degrees)		30.4544		Longitude (Decimal Degrees)		-84.2204	
Collection (comp begin or grab)		Date		Time		Bottle Group(s)	
☐ Comp	☒ Grab	9/20/17	10:25	3:54	7:14	0.3	A, C D, E
Matrix (Salt, Fresh)		Diss. Oxygen (mg/L)		pH		Sp. Conductance (umho/cm)	
Fresh		3.54		7.14		138	
Temp (C)		25.35		Salinity (ppt)		0.06	
Latitude (Decimal Degrees)		30.444661		Longitude (Decimal Degrees)		-84.344711	
Collection (comp begin or grab)		Date		Time		Bottle Group(s)	
☐ Comp	☐ Grab						
Matrix (Salt, Fresh)		Diss. Oxygen (mg/L)		pH		Sp. Conductance (umho/cm)	
Temp (C)				Salinity (ppt)			
Latitude (Decimal Degrees)				Longitude (Decimal Degrees)			

Relinquished By: Curtis Musson	Date/Time: 9-20-2017 / 12:25	Number of Coolers: 3	Received By: SR	Date/Time: 9-20-2017 / 12:48
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Cooler Packing Worksheet for Request: RQ-2017-09-18-25
Sans, Sally, 8 mile, chicken, Laffayette Drain, Godby, Black, Soapstone

Ship Cooler On: 9/7/2017
Customer/Project: WAS-SECT/SMP

Assigned To: REAVES_S
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
Group B: Metlas
Group C: E.coli
Group D: Tracers (A-HERB Short list)
Group E: PCR (FILTER & 183)
Group F: PCR (FILTER & GFD)

Requested Analyses:

Bottle Group: A

of Sites: 8

Container ID: P-1L

Qty: 8 Preservation: ICE

Lot # 00067591

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 # 1199138

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 # 00068654

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 # 00068347

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: 1

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00068654

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-ICP
W-ICPMS

Description

Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

Bottle Group: C

of Sites: 5

Container ID: P-250ML-WO-THI

Qty: 5 Preservation: ICE

Lot # L17048

Description:

Analysis

ECOLI-18QT

Description

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

Bottle Group: D

of Sites: 4

Container ID: BG-1L

Qty: 4 Preservation: ICE

Lot # 00068050

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-AHERB-AA

W-SUC-AA-R

W-UHERB-AA

Description

Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS

Analysis of sucralose in water matrices by HPLC/MS/MS

Urea herbicides and other chemicals in water matrices by HPLC/MS/MS

Bottle Group: E

of Sites: 3

Container ID: QPCR-P-250ML

Qty: 6 Preservation: ICE

Lot # 00067801

Description:

Analysis

PCR-FILTER

PUR-HF183

Description

Preparation of Samples by Filtration and held for qPCR Analysis

Detection and quantification of human-specific HF183 Bacteroides genetic marker with quantitative polymerase chain reaction

Bottle Group: F

of Sites: 1

Container ID: QPCR-P-250ML

Qty: 2 Preservation: ICE

Lot # 00067801

Description:

Analysis

PCR-FILTER

PCR-GFD

Description

Preparation of Samples by Filtration and held for qPCR Analysis

Detection and quantification of bird specific Helicobacter GFD genetic marker with quantitative polymerase chain reaction

Cooler Packed By: SR

Number of Coolers: 4

Date: 9-7-17

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-2017-09-18-25