FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

Data Qualified? (Yes) / No DO

Location/STORET Station Name: Wards Creek upstream of bridge at CR 259 **Date:** 05/02/2017 (mm/dd/yyyy)

STORET # G1WA0002 **WBID:** 459 **Latitude:** 30.605000 (Decimal Degrees)

County: Jefferson **RQ -** 2017-05-01-28 **ORG ID:** 21FLWQA **Longitude:** -83.893257 (Decimal Degrees)

Receiving Body of Water: Lake Miccosukee **Field ID:** G1WA0002_05022017

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson		X	X		
Raymond Stuart	X	X	X	X	X

Sampling Equipment

- [x] Sample Container
- [ ] Van Dorn
- [ ] Pole
- [ ] Carboy
- [ ] Syringe
- [ ] Dipper
- [ ] Other

Equipment ID

Collection Method

- [ ] Wading
- [x] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

Water Level: Dry / Pooled / (Low) / Normal / High / Flooded

Matrix: (Fresh) / Marine / DI

Meter ID# Biology #2 **Photos:** Yes / (No)

Tide Falling: Yes / No / (NA)

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°)
(EST)	12:10	0.15	0.3	1.66	18.7	5.61	0.02	VOB	54	21.28
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 ☐ H_2SO_4			☐ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO_3	6253070	9-9-17	☒ <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			

1:1 Nitric Acid NA – 6253070 EXP: 09/09/17 Warning! See SDS

ative Sticker(s) Here Available)

Notes:

~~Kit A~~ CM
E. coli
Tracers
Markers

Wards Creek upstream of bridge at CR 259

STORET ↓

G1WA0002

Field ID →

Wards Creek upstream of bridge at CR 259

May 2, 2017

G1WA0002_05022017

Signature: Curtis Musson **Date:** 5-2-17

Field Parameters Entered into LIMS: CM 5-3-17 (Initials/Date) **Field Parameters QC in LIMS:** (Initials/Date)

Date Migrated to STORET: (Initials/Date) **Field Sheets Scanned/Saved:** (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 sheet

Meter Bio #2 RQ- 2015.05.01-28 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	5/2/17	708	22.37	8.677	8.69	100.0	38.0	—	P	LAB
ICV	Curtis Musson	5/2/17	710	22.35	8.677	8.71	100.4	38.0	—	P	LAB
CCV	Curtis Musson	5/2/17	1442	22.65	8.627	9.80	113.5	39.0	—	Fail	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	5/2/17	712	161111D	11/17	1000	1000	Pass	LAB
ICV	Curtis Musson	5/2/17	713	161111D	11/17	1000	1000	P	LAB
CCV	Curtis Musson	5/2/17	1444	2516F25	10/17	100	102	P	LAB
CCV									

Report specific conductance as a whole number with no decimal figure. Conductivity Acceptance criteria ± 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	5/2/17	715	161111B	5/18	7.0	7.00	-18	P	LAB
Calibr.	Curtis Musson	5/2/17	717	170310A	3/18	4.01	4.01	158	P	LAB
Calibr.	Curtis Musson	5/2/17	719	161111C	5-18	10.01	9.97	-181	P	LAB
ICV	Curtis Musson	5/2/17	720	161111C	5/18	10.01	9.92	-178	P	LAB
CCV	Curtis Musson	5/2/17	1446	170310A	3-18	3.87	3.87	164	P	LAB
CCV						4.01				

Report pH with one decimal place; pH Acceptance criteria ±0.2 SU; mV pH7 Range 0±50; mV pH 4 Range +180±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 ±5 % or ±0.05m, whichever is greater

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Request Number: RQ-2017-05-01-28
Wakulla, Moriah, Caney, Wards
Customer: WQ-ASSESS
Project ID: SMP

Requester: Curtis Musson
Collected By: Curtis Musson Raymond Stuart

Field Report Prepared By: Raymond Stuart
Sampling Agency: FDEP

Location

Field ID → Wakulla River Below Highway 98 Bridge
May 2 2017
G1WA0028_05022017

STORET → G1WA0028

Wakulla River Below Highway 98 Bridge

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 5/1/17 Time 9:05	Eastern / Central	Collection (comp begin or grab) Date	Time
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 6.25			
Temp (C) 20.69	pH 7.70	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 400	
Salinity (ppt) 0.19	Comments			
Latitude (Decimal Degrees) 30.17607	Longitude (Decimal Degrees) -84.2429			

Bottle Group(s): A

Location

Field ID → Wakulla River above US 98
May 2 2017
G1WA0046_05022017

STORET → G1WA0046

Wakulla River above US 98

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 5/2/17 Time 9:40	Eastern / Central	Collection (comp begin or grab) Date	Time
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 5.73			
Temp (C) 20.50	pH 7.66	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 367	
Salinity (ppt) 0.18	Comments			
Latitude (Decimal Degrees) 30.17963	Longitude (Decimal Degrees) -84.24759			

Bottle Group(s): A

Location

Field ID → Moriah Creek 100 meters upstream of Newport Rd.
May 2 2017
G1WA0057_05022017

STORET → G1WA0057

Moriah Creek 100 meters upstream of Newport Rd.

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 5/2/17 Time 10:20	Eastern / Central	Collection (comp begin or grab) Date	Time
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 3.96			
Temp (C) 19.63	pH 6.91	Sample Depts (m) 0.075	Sp. Conductance (umho/cm) 457	
Salinity (ppt) 0.22	Comments			
Latitude (Decimal Degrees) 30.1857	Longitude (Decimal Degrees) -84.1929			

Bottle Group(s):

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time
	5/2/17 1:57 pm	3		

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Request Number: RQ-2017-05-01-28
Wakulla, Moriah, Caney, Wards
Customer: WQ-ASSESS
Project ID: SMP
Requester: Curtis Musson
Collected By: _____
Field Report Prepared By: _____
Sampling Agency: FDEP

Location

Field ID → Caney Creek Upstream of US 90
May 2, 2017
G1WA0014_05022017

Caney Creek Upstream of US 90
STORET
G1WA0014

☐ Comp ☒ Grab
Collection (comp begin or grab) Date 5/2/17 Time 11:30 (Eastern / Central)
Collection (comp begin or grab) Date _____ Time _____
Bottle Group(s): B C D E

Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 9.95		
Temp (C) 20.82	pH 7.43	Sample Depts (m) 0.05	Sp. Conductance (umho/cm) 134
Salinity (ppt) 0.06	Comments		
Latitude (Decimal Degrees) 30.5325		Longitude (Decimal Degrees) -83.9501	

Location

Field ID → Wards Creek upstream of bridge at CR 259
May 2, 2017
G1WA0002_05022017

Wards Creek upstream of bridge at CR 259
STORET
G1WA0002

☐ Comp ☒ Grab
Collection (comp begin or grab) Date 5/2/17 Time 12:10 (Eastern / Central)
Collection (comp begin or grab) Date _____ Time _____
Bottle Group(s): C D E Metals Bottle

Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 1.66		
Temp (C) 21.28	pH 5.61	Sample Depts (m) 0.15	Sp. Conductance (umho/cm) 54
Salinity (ppt) 0.02	Comments		
Latitude (Decimal Degrees) 30.605000		Longitude (Decimal Degrees) -83.893257	

Location

Field ID → Caney Creek Downstream of 158A
May 2, 2017
G1WA0060_05022017

Caney Creek Downstream of 158A
STORET
G1WA0060

☐ Comp ☒ Grab
Collection (comp begin or grab) Date 5/2/17 Time 12:48 (Eastern / Central)
Collection (comp begin or grab) Date _____ Time _____
Bottle Group(s): ~~A~~ B no metals bottle C D E

Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 9.20		
Temp (C) 21.88	pH 6.82	Sample Depts (m) 0.05	Sp. Conductance (umho/cm) 133
Salinity (ppt) 0.06	Comments		
Latitude (Decimal Degrees) 30.52		Longitude (Decimal Degrees) -83.94	

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time

Group: A	Bottle Type:	P-1L	# of Bottles: 4	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	cn 4 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**	cn 4 3
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 4	Preservative:	ICE And H2SO4	**Enter Number of Bottles Sent to Lab**	cn 4 3
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 4	Preservative:	ICE-FLTR	**Enter Number of Bottles Sent to Lab**	cn 4 3
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS						
Group: B	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
	CHLSUITE-W						
Group: B	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	HNO3	**Enter Number of Bottles Sent to Lab**	2
	W-ICP W-ICPMS						

Group: B	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	**Enter Number of Bottles Sent to Lab**	2
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC						
Group: B	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	ICE-FLTR	**Enter Number of Bottles Sent to Lab**	2
	W-PO4-F						
Group: C	Bottle Type:	P-250ML-WO-THI	# of Bottles: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	3
	ECOLI-18QT						
Group: D	Bottle Type:	BG-1L	# of Bottles: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	3
	W-AHERB-AA W-SUC-AA-R W-UHERB-AA						
Group: E	Bottle Type:	QPCR-P-250ML	# of Bottles: 6	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	6
	PCR-HF183						

Cooler Packing Worksheet for Request: RQ-2017-05-01-28
Wakulla, Moriah, Caney, Wards
Ship Cooler On: 4/17/2017
Customer/Project: WQ-ASSESS/SMP

Assigned To:
Requester: Curtis Musson
Priority: 3

850-245-8453
Division Of Water Facilities, FL DEP
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

Attn: curtis musson

Comments:
No preservatives needed.

Group A: Freshwater Nutrient Kit
Group B: Freshwater Nutrient Kit With Metals
Group C: E. coli
Group D: Organics (Wastewater Tracers)
Group E: PCR HF183

Packing Notes:
No FedEx labels needed, samples will be dropped off

Requested Analyses:

Bottle Group: A **# of Sites: 4**

Container ID: P-1L **Qty: 4** **Preservation: ICE** **Lot #** 0006799

Description: Plastic Bottle 1L

Analysis	Description
ALKALINITY	Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Turbidity in aqueous matrices
W-CL-IC	Chloride in aqueous matrices
W-COLOR	True Color measured at 450 nm
W-F	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO4-IC	Sulfate in aqueous matrices
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: BP-1L **Qty: 4** **Preservation: ICE** **Lot #** 1196409

Description: Brown Plastic Bottle 1L

Analysis	Description
CHLSUITE-W	Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry

Container ID: P-500ML **Qty: 4** **Preservation: ICE And H2SO4** **Lot #** 0006[illegible]590

Description: Plastic Bottle 500 mL Affix YELLOW sulfuric acid dot to container.

Analysis	Description
W-NH3	Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML **Qty: 4** **Preservation: ICE-FLTR** **Lot #** 0006[illegible]93

Description: Plastic Bottle 125 mL

Analysis	Description
W-PO4-F	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group: B # of Sites: 2

Container ID: P-1L **Qty: 2** **Preservation: ICE** **Lot #** 0006[illegible]54

Description: Plastic Bottle 1L

Analysis	Description
ALKALINITY	Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Turbidity in aqueous matrices
W-CL-IC	Chloride in aqueous matrices
W-COLOR	True Color measured at 450 nm
W-F	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO4-IC	Sulfate in aqueous matrices
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: BP-1L **Qty: 2** **Preservation: ICE** **Lot #** 1196[illegible]

Description: Brown Plastic Bottle 1L

Analysis	Description
CHLSUITE-W	Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry

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Container ID: P-500ML **Qty: 2** **Preservation: HNO3** **Lot #** 0067599

Description: Plastic Bottle 500 mL Affix RED nitric acid dot to container.

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

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Container ID: P-500ML **Qty: 2** **Preservation: ICE And H2SO4** **Lot #** 0067599

Description: Plastic Bottle 500 mL Affix YELLOW sulfuric acid dot to container.

Analysis	Description
W-NH3	Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML **Qty: 2** **Preservation: ICE-FLTR** **Lot #** 1196409

Description: Plastic Bottle 125 mL

Analysis	Description
W-PO4-F	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group: C # of Sites: 3

Container ID: P-250ML-WO-THI **Qty: 3** **Preservation: ICE** **Lot #** L17013

Description:

Analysis	Description
ECOLI-18QT	Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

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Bottle Group: D # of Sites: 3

Container ID: BG-1L **Qty: 3** **Preservation: ICE** **Lot #** 1196409

Description: Brown Glass Bottle 1L Affix BLUE dot to container.

Analysis	Description

W-AHERB-AA	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS
W-SUC-AA-R	Analysis of sucralose in water matrices by HPLC/MS/MS
W-UHERB-AA	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 #** 0006680

Description:

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

Cooler Packed By: ATB Date: _____

DEP Cooler ID #(s): 3

Kit must also include:
- ✓ Field Sheets
- ✓ Temperature Control Bottle (1 per cooler)
- ___ FedEx Bills, if applicable (1 per cooler)
- ✓ Plastic Bags
- ✓ Zip Ties

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2017-05-01-28