FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

Data Qualified? Yes / (No)

Location/STORET Station Name: East River Downstream of Boggy Bayou **Date:** 08/16/2017 (mm/dd/yyyy)

STORET # G1WA0056 **WBID:** 1089 **Latitude:** 30.0972 (Decimal Degrees)

County: Wakulla **RQ -** 2017-08-14-31 **ORG ID:** 21FLWQA **Longitude:** -84.1752 (Decimal Degrees)

Receiving Body of Water: St Marks, Gulf of Mexico **Field ID:** G1WA0056_08162017

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

Sampling Equipment

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

Collection Method

- ☐ Wading
- ☐ From Shore
- ☐ Other (note below)

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

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

Matrix: Fresh / (Marine) / DI

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

Tide Falling: Yes / No / NA

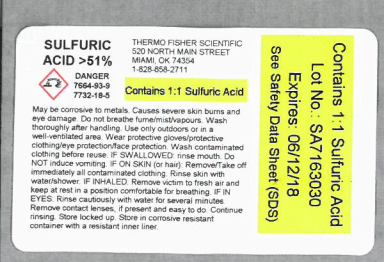
Field Sample

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°)
(EST)	12:16	0.3	2.4	6.79	96.5	7.44	9.43	1.2	16175	30.76
CEN		1.9		5.73	80.2	7.47	15.53		25500	29.14

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	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4	SA 7163030	06/12/18	[x] <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Marine)	[x] Alkalinity / W-F / W-TSS / TURBIDITY	[x] 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			



QA/QC Sample Information

Duplicate

Time Zone: EST CEN **Sample Depth (m):** _____
Time: _____ **Total Depth (m):** _____ **Field 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_2SO_4	SA 7163030	06/12/18	☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ < 2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice	Place Preservative Sticker(s) Here (If Available)		
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	☐ Ice ☐ Other			

Blank

Time Zone: (EST) CEN **Time:** 1100 **Field ID:** G1WA0055_08162017B **Location:** St Marks River C1

☒ 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_2SO_4	SA 7163030	06/12/18	☒ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ < 2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	Place Preservative Sticker(s) Here (If Available)		
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: Kit B

Field ID →
East River Downstream of Boggy Bayou
Aug 16, 2017
G1WA0056_08162017

East River Downstream of Boggy Bayou
STORET ↓
G1WA0056

Signature: _____ **Date:** 8/16/17

Field Parameters Entered into LIMS: DT 8/18/17 (Initials/Date) **Field Parameters QC in LIMS:** _____ (Initials/Date)

Date Migrated to STORET: _____ (Initials/Date) **Field Sheets Scanned/Saved:** DT 8/18/17 (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.

Meter: Bio 2 | RQ-: 2017-08-14-31 | 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.	CurtisMusson	8/16/17	703	23.56	8.677	8.66	100.0	35.9	—	P	LAB
ICV	CurtisMusson	8-16-17	706	23.56	8.482	8.66	102.2	35.9	—	P	LAB
CCV	Blake Spencer	8/17/17	0732	23.02	8.578	8.86	103.7	25.7	—	P	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.	CurtisMusson	8/16/17	709	170310D	03/2018	1000	1000	P	LAB
ICV	CurtisMusson	8/16/17	710	170310D	03/2018	1000	1000	P	LAB
CCV	CurtisMusson	8/16/17	1647	170614C	06/2018	50,000	50,061	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.	CurtisMusson	8-16-17	712	170310B	09/2018	7.0	7.00	-1	P	LAB
Calibr.	CurtisMusson	8-16-17	714	170614A	06/2018	4.01	4.01	173	P	LAB
Calibr.	CurtisMusson	8-16-17	716	170310C	09/2018	10.01	9.95	-159	P	LAB
ICV	CurtisMusson	8-16-17	718	170614A	06/2018	4.01	3.96	174	P	LAB
CCV	CurtisMusson	8-16-17	1649	170310C	9/2018	10.01	9.88	-154	P	LAB
CCV										

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

Request Number: RQ-2017-08-14-31
Event: East, St. Marks River, Dickerson Bay
Customer: WAS-SECT
Project ID: SMP

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Requester: Curtis Musson
Collected By: Curtis Musson

Field Report Prepared By: Raymond W Sturrt
Sampling Agency: FDEP

Location: Dickson Bay North — STORET: G1WA0062
Field ID: Dickson Bay North — Aug 16, 2017 — G1WA0062_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 9:30 am (Eastern / Central)
Collection (comp begin or grab) Date / Time	
Bottle Group(s)	A
Matrix (Salt, Fresh)	
Diss. Oxygen (mg/L)	6.68
Temp (C)	29.46
pH	8.26
Sample Depts (m)	0.3
Sp. Conductance (umho/cm)	43218
Salinity (ppt)	27.71
Comments	
Latitude (Decimal Degrees)	29.98847
Longitude (Decimal Degrees)	-84.35098

Location: Dickson Bay South — STORET: G1WA0063
Field ID: Dickson Bay South — Aug 16, 2017 — G1WA0063_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 9:45 am (Eastern / Central)
Collection (comp begin or grab) Date / Time	
Bottle Group(s)	A
Matrix (Salt, Fresh)	
Diss. Oxygen (mg/L)	7.22
Temp (C)	29.46
pH	7.79
Sample Depts (m)	0.3
Sp. Conductance (umho/cm)	39900
Salinity (ppt)	25.40
Comments	
Latitude (Decimal Degrees)	29.98033
Longitude (Decimal Degrees)	-84.35245

Location: Mouth of East River — STORET: G1WA0011
Field ID: Mouth of East River — Aug 16, 2017 — G1WA0011_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 11:59 am (Eastern / Central)
Collection (comp begin or grab) Date / Time	
Bottle Group(s)	A
Matrix (Salt, Fresh)	
Diss. Oxygen (mg/L)	7.56
Temp (C)	30.55
pH	7.62
Sample Depts (m)	0.3
Sp. Conductance (umho/cm)	18390
Salinity (ppt)	10.72
Comments	
Latitude (Decimal Degrees)	30.0893
Longitude (Decimal Degrees)	-84.1774

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time
	8/16/17 3:30 pm	3	Tyler Reynolds	08/16/17 @ 3:36 pm

Request Number: RQ-2017-08-14-31
Event: East, St. Marks River, Dickerson Bay
Customer: WAS-SECT
Project ID: SMP

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Requester: Curtis Musson
Collected By: _____
Field Report Prepared By: _____
Sampling Agency: FDEP

East River Downstream of Boggy Bayou STORET G1WA0056
Field ID: East River Downstream of Boggy Bayou
Aug 16, 2017 G1WA0056_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 12:16 pm (Eastern / Central)	Collection (comp begin or grab) Date	Time
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 6.79		
Temp (C) 30.76	pH 7.44	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 16175
Salinity (ppt) 9.43	Comments		
Latitude (Decimal Degrees) 30.0972		Longitude (Decimal Degrees) -84.1752	

Bottle Group(s): A

Apalachee Bay South of St. Marks River STORET G1WA0048
Field ID: Apalachee Bay South of St. Marks River
Aug 16, 2017 G1WA0048_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 12:55 pm (Eastern / Central)	Collection (comp begin or grab) Date	Time
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 7.65		
Temp (C) 30.97	pH 7.79	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 32587
Salinity (ppt) 20.79	Comments		
Latitude (Decimal Degrees) 30.04978		Longitude (Decimal Degrees) -84.18265	

Bottle Group(s): A

St. Marks River at Channel Marker 22 STORET G1WA0008
Field ID: St. Marks River at Channel Marker 22
Aug 16, 2017 G1WA0008_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 1:20 pm (Eastern / Central)	Collection (comp begin or grab) Date	Time
Matrix (Salt) Fresh)	Diss. Oxygen (mg/L) 7.77		
Temp (C) 27.49	pH 7.00	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 8220
Salinity (ppt) 4.08	Comments		
Latitude (Decimal Degrees) 30.0929		Longitude (Decimal Degrees) -84.1939	

Bottle Group(s): A

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time
			Tyler Reynolds	08/16/17 @ 3:36 pm

Request Number: RQ-2017-08-14-31

Event: East, St. Marks River, Dickerson Bay

Customer: WAS-SECT

Project ID: SMP

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Requester: Curtis Musson

Collected By: _____

Field Report Prepared By: _____

Sampling Agency: FDEP

Location

St. Marks River at Channel Marker 60 STORET ↓

Q1WA0055

Field ID →

St. Marks River at Channel Marker 60

Aug 16, 2017

Q1WA0055_08162017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 1:44pm Eastern / Central	Collection (comp begin or grab) Date / Time		Bottle Group(s)
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 7.58			A
Temp (C) 25.45	pH 6.63	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 747	B
Salinity (ppt) 0.37	Comments			
Latitude (Decimal Degrees) 30.1447		Longitude (Decimal Degrees) -84.2088		

Location

QC Duplicate STORET ↓

St. Marks River at Channel Marker 60

Q1WA0055

Field ID →

C DUPLICATE St. Marks River at Channel Marker 60

Aug 16, 2017

Q1WA0055_08162017D

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 1:44pm Eastern / Central	Collection (comp begin or grab) Date / Time		Bottle Group(s)
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L) 7.58			A
Temp (C) 25.45	pH 6.63	Sample Depts (m) 0.3	Sp. Conductance (umho/cm) 747	B
Salinity (ppt) 0.37	Comments			
Latitude (Decimal Degrees) 30.1447		Longitude (Decimal Degrees) -84.2088		

Location

Field ID →

Aug 16, 2017

Q1WA0055_08162017B

STORET #

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/16/17 Time 11:00am Eastern / Central	Collection (comp begin or grab) Date / Time		Bottle Group(s)
Matrix (Salt, Fresh) DI Water	Diss. Oxygen (mg/L)			A
Temp (C)	pH	Sample Depts (m)	Sp. Conductance (umho/cm)	
Salinity (ppt)	Comments QC Blank / DI Water			
Latitude (Decimal Degrees)		Longitude (Decimal Degrees)		

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time
			Tyler Reynolds	08/16/17 @ 3:36 pm

Group: A	Bottle Type:	P-1L	# of Bottles: 9	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	9
	ALKALINITY TURBIDITY W-F W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 9	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	9
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 9	Preservative:	ICE And H2SO4	**Enter Number of Bottles Sent to Lab**	9
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 9	Preservative:	ICE-FLTR	**Enter Number of Bottles Sent to Lab**	9
	W-PO4-F						
Group: B	Bottle Type:	P-250ML-WO-THI	# of Bottles: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
	ENT-24-QT						
Group: B	Bottle Type:	P-120ML-OC	# of Bottles: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
	FCOLI-MF						

Cooler Packing Worksheet for Request: RQ-2017-08-14-31
East, St. Marks River, Dickerson Bay
Ship Cooler On: 8/2/2017
Customer/Project: WAS-SECT/SMP

Assigned To: REYNOLDS_T
Requester: Curtis Musson
Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:
No preservatives needed.

Group A: Marine Kit
Group B: Fecal C, Entrococci

Packing Notes:
No FedEx labels needed

Requested Analyses:

Bottle Group: A # of Sites: 9

Container ID: P-1L **Qty: 9** **Preservation: ICE** **Lot #** 0006865 7
Description: Plastic Bottle 1L

Analysis	Description
ALKALINITY	Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Turbidity in aqueous matrices
W-F	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: BP-1L **Qty: 9** **Preservation: ICE** **Lot #** 1199138
Description: Brown Plastic Bottle 1L

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

Container ID: P-500ML **Qty: 9** **Preservation: ICE And H2SO4** **Lot #** 0006854
Description: Plastic Bottle 500 mL
Affix YELLOW sulfuric acid dot to container.

Analysis	Description