



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

PAGE 1 OF

Data Qualified?
Yes / No

STORET Station Name: East River Downstream of Boggy Bayou

Date: 11/30/2016

(mm/dd/yyyy)

STORET Station ID: G1WA0056

WBID: 1089

Latitude: 30.0972

(Decimal Degrees)

County: Wakulla RQ - 2016-11-28-15

ORG ID: 21FLWQA

Longitude: -84.1752

(Decimal Degrees)

Receiving Body of Water: Gulf of Mexico

Field ID: G1WA0056-11302016

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Curtis Musson		X	X					
Ben Ralys			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 / Low / <u>Normal</u> / High / Flooded	Matrix: Fresh / <u>Marine</u> / DI
Meter ID# Biology 2	Photos: Yes / <u>No</u>
	Tide Falling: Yes / <u>No</u> / 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	10:00	0.3	2.00	6.38	79.0	7.62	21.61	VOB	34296	19.5
CEN	10:05	1.5		6.68	83.1	7.62	22.25		35240	19.5

Biological Samples Collected: <u>None</u> HA SCI LVS RPS LVI Other						
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	SA 6209120	07/27/17	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP		☐ Ice ☐ HNO2			☐ <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-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			
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR		☐ Ice			
Periphyton	☐ ALGAE-ID		☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH		☐ Ice ☐ Other			

Contains
1:1
Sulfuric Acid
SA-6209120
EXP: 07/27/17
Warning!
See SDS

Sticker(s) Here
(available)

QA/QC Sample Information

Duplicate

Time Zone: EST CEN		Sample Depth (m): _____		Field ID: _____	
Time: _____		Total Depth (m): _____			
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			☐ < 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 ☐ Enteroc ☐ QPCR	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Blank

Time Zone: EST CEN		Time: _____	Field ID: G1WA0028B-11302016	Location: Wakulla River Below Highway 98 Bridge	
☐ 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	SA 6209120	07/27/17	☐ < 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 ☐ Enteroc ☐ QPCR	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Notes:

East River Downstream of Boggy Bayou STORET ↓  G1WA0056		Field ID → East River Downstream of Boggy Bayou Nov 30, 2016  G1WA0056-11302016
Signature: 		Date: 11/30/2016

Field Parameters Entered into LIMS: Dr 12/2/16 (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 name.

Meter Bio #2

RQ- 2016-11-28-15

Project Snp / S+mark

- 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 09/23/2016

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 Mussen	11/30/16	8:01	21.4	8.846	8.65	100.0	44.1	—	P	L
ICV	Curtis Mussen	11/30/16	8:02	21.41	8.846	8.84	100.0	44.1	—	P	L
CCV	Curtis Mussen	11/30/16	12:49	22.63	8.644	8.66	100.1	42.0	—	P	L
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 Mussen	11/30/16	0720	160330D	04/2017	1000	1000	P	LAB
ICV	Curtis Mussen	11/30/16	0722	161111E	05/2017	100	100	P	LAB
CCV	Curtis Mussen	11/30/16	1253	160330E	4/12/17	50,000	49925	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 Mussen	11/30/16	0725	161111B	05/2018	7.0	7.00	-24.0	P	L
Calibr.	Curtis Mussen	11/30/16	0727	160330A	4/12/17	4.01	4.01	154.1	P	L
Calibr.	Curtis Mussen	11-30-16	0729	160330C	4/12/17	10.01	9.97	-189.0	P	L
ICV	Curtis Mussen	11/30/16	0731	161111B	5/2018	7.00	7.07	-23.0	P	L
CCV	Curtis Mussen	11/30/16	1251	160330C	10/2017	10.01	10.00	-191	P	L
CCV										

Report pH with one decimal place; 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 ;

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

New D.O. membrane

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WQAP

Project ID: SMP

Requester: Benjamin Ralys

Collected By:

Ben Ralys, Curtus Mussen

Field Report Prepared By:

Curtus Mussen

Sampling Agency:

FDEP

Location		Mouth of East River		Field ID		GLWA0011-11302016		STORET #		GLWA0011		Latitude		30.0893		Longitude		-84.1774		Location		East River down stream of Bagg		Field ID		GLWA0056-11302016		STORET #		GLWA0056		Latitude		30.0972		Longitude		-84.1752		Location		St. Marks River at Channel Marker 22		Field ID		GLWA0008-11302016		STORET #		GLWA0008		Latitude		30.0929		Longitude		-84.1939		Location		St. Marks River at Channel Marker 60		Field ID		GLWA0055-11302016		STORET #		GLWA0055		Latitude		30.1447		Longitude		-84.2088	
☐ Comp	☒ Grab	Matrix (type, e.g., Salt)	Temp (C)	pH	Salinity (ppt)	dd	dms	Collection (comp begin or grab)	Date	Time	Diss. Oxygen	mg/L	% sat	Sp. Conductance (umho/cm)	ft	m	Composite end	Date	Time	Bottle Group(s)																																																											
																					11-30-16	9:30	7.12	0.3	27945																																																						
																					11-30-16	10:00	6.38	0.3	34296																																																						
																					11-30-2016	10:45	8.01	0.3	18376																																																						
																					11-30-2016	11:00	6.17	0.3	925																																																						

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Curtus Mussen	11-30-16 / 12:30	DROP off	1	SK	11-30-16 / 12:30

Group: B	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	0
Group: C	Bottle Type: ALKALINITY TURBIDITY W-F W-TSS	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
Group: C	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
Group: C	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4		Enter Number of Bottles Sent to Lab	0
Group: C	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	0
Group: D	Bottle Type: ALKALINITY TURBIDITY W-F W-TSS	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
Group: D	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
Group: D	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4		Enter Number of Bottles Sent to Lab	0
Group: D	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	0

Cooler Packing Worksheet for Request: RQ-2016-11-28-15

East River, St. Marks River and Wakulla River

Ship Cooler On: 11/29/2016

Customer/Project: WQAP/SMP

Requester: Benjamin Ralys

Priority: 3

850-245-8443
2600 Blair Stone Rd
MS #3560
Tallahassee, FL 32399-2400
Attn: Ben Ralys

Comments:

No preservatives needed.

Bottle Group A: Saltwater chemistry suite

Bottle Group B: Freshwater chemistry suite

Bottle Group C: Field Blank

Bottle Group D: 1 Duplicate for saltwater chemistry

3 - liters of DI water

Requested Analyses:

Bottle Group: A

of Sites: 4

Container ID: P-1L

Qty: 4 Preservation: ICE

Lot # 00065893

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-F

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO₃/L

Turbidity in aqueous matrices

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Total Suspended Solids in aqueous matrices

Container ID: BP-1L

Qty: 4 Preservation: ICE

Lot # 1185930

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 4 Preservation: ICE And H2SO4

Lot # 00066045

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: 4 Preservation: ICE-FLTR

Lot # 00065449

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-1L

Qty: 1 Preservation: ICE

Lot # 00065893

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: 1 Preservation: ICE

Lot # 1185930

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00066045

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: 1 Preservation: ICE-FLTR

Lot # 00065449

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: C

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00065893

Description: Plastic Bottle 1L

Analysis

ALKALINITY
TURBIDITY
W-F
W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L
Turbidity in aqueous matrices
Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Total Suspended Solids in aqueous matrices

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1185930

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00065
00066045

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH3

Description

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: 1 Preservation: ICE-FLTR

Lot # 00065849

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: D

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00065893

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-F

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L

Turbidity in aqueous matrices

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Total Suspended Solids in aqueous matrices

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1185930

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00066045

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

Qty: 1 Preservation: ICE-FLTR

Lot # 00065449

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By: Date: 11/29/16

DEP Cooler ID #(s): _____

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-2016-11-28-15