



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 10

Data Qualified?

Yes / No

Location/STORET Station Name: Wakulla River above US 98

Date: 05/02/2017

STORET # G1WA0046

WBID: 1006W

Latitude: 30.17963

County: Wakulla

RQ - 2017-05-01-28

ORG ID: 21FLWQA

Longitude: -84.24759

Receiving Body of Water: St. Marks, GOM

Field ID: G1WA0046_05022017

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Curtis Musson			X	X	X	X	☒ Sample Container	☐ Van Dorn	☐ Pole		
Raymond Stuart		X					☐ 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 / Normal / High / Flooded	Matrix:	Fresh / Marine / DI							
Meter ID#	BioLog #2	Photos:	Yes / No							
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (umhos/cm)	Temp. (C°)
EST	9:40	0.3	1.6	5.73	63.7	7.66	0.18	1.4	367	20.50
CEN	9:42	1.1		7.03	79.8	7.63	0.17		365	20.51

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

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

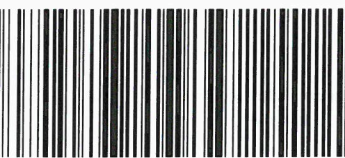
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP	☒ Ice ☒ H2SO4	6302030	10/28/17	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice			
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 ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes: High Tide at 9:09 am
Kit A

Field ID: →

Wakulla River above US 98

May 2, 2017



G1WA0046_05022017

Signature: Curtis Musson

Date: 5-2-2017

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)

Boxed "X" this box if there is qualified data on this date

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 Mussen	5/2/17	708	22.37	8.677	8.69	100.0	38.0	-	P	LAB
ICV	Curtis Mussen	5/2/17	710	22.35	8.677	8.71	100.4	38.0	-	P	LAB
CCV	Curtis Mussen	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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Mussen	5/2/17	712	16111D	11/17	1000	1000	P	LAB
ICV	Curtis Mussen	5/2/17	713	16111D	11/17	1000	1000	P	LAB
CCV	Curtis Mussen	5/2/17	1444	256F25	10/17	100	102	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	5/2/17	715	16111B	5/18	7.0	7.00	-18	P	LAB
Calibr.	Curtis Mussen	5/2/17	717	170310A	3/18	4.0	4.01	158	P	LAB
Calibr.	Curtis Mussen	5/2/17	719	16111C	5-18	10.0	9.97	-181	P	LAB
ICV	Curtis Mussen	5/2/17	720	16111C	5/18	10.0	9.92	-178	P	LAB
CCV	Curtis Mussen	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 $+180 \pm 50$;

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 ± 0.05 m, whichever is greater

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Page 1 of 4

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

Requester: Curtis Musson
Collected By: *Curtis Musson*
Field Report Prepared By: *Edward Stuart*
Sampling Agency: FDEP

Field Report Prepared By: *Edward Stuart*
Sampling Agency: FDEP

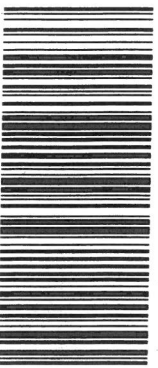
Location

Field ID: →

Wakulla River
Below Highway
98 Bridge

May 2, 2017

GTWA0028_05022017



STORET ↓

Wakulla River
Below Highway
98 Bridge



GTWA0028

Location

Field ID: →

Wakulla River
above US 98

May 2, 2017

GTWA0046_05022017



STORET ↓

Wakulla River
above US 98



GTWA0046

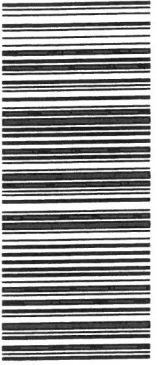
Location

Field ID: →

Moriah Creek 100
meters upstream
of Newport F.d.

May 2, 2017

GTWA0057_05022017



STORET ↓

Moriah Creek 100
meters upstream
of Newport Rd.



GTWA0057

Relinquished By: *Edward Stuart*

Date/Time

5/2/17 1:57pm

Number of Coolers

3

Received By:

Date/Time

Collection (comp begin or grab)
Date 5/1/17 Time 9:05

Collection (comp begin or grab)
Date

Time

Bottle Group(s)

Matrix (Salt, Fresh)

Temp

20.69

pH

7.70

Sample Depth (m)

0.3

Sp. Conductance (umho/cm)

400

A

Collection (comp begin or grab)

Date 5/2/17 Time 9:40

Collection (comp begin or grab)

Time

Bottle Group(s)

Matrix (Salt, Fresh)

Temp

20.50

pH

7.66

Sample Depth (m)

0.3

Sp. Conductance (umho/cm)

367

A

Salinity (ppt)

0.18

Comments

Latitude (Decimal Degrees)

30.17963

Longitude (Decimal Degrees)

-84.24759

Collection (comp begin or grab)

Date 5/2/17 Time 10:20

Collection (comp begin or grab)

Time

Bottle Group(s)

Matrix (Salt, Fresh)

Temp

19.63

pH

6.91

Sample Depth (m)

0.075

Sp. Conductance (umho/cm)

457

Salinity (ppt)

0.22

Comments

Latitude (Decimal Degrees)

30.1857

Longitude (Decimal Degrees)

-84.1929

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

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

Requester: **Curtis Musson**

Field Report Prepared By: _____
 Sampling Agency: **FDEP**

Collected By: _____

Location

Field IC →

Caney Creek
Upstream of
Field US 90

May 3, 2017

GIWA0014_05022017



STORET ↓

Caney Creek
Upstream of
US 90

GIWA0014



☐ Comp	Collection (comp begin or grab)		☒ Eastern	Collection (comp begin or grab)		Bottle Group(s) B C D E
☒ Grab	Date 5/2/17	Time 11:30	☒ Central	Date	Time	
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L)		Sample Depts (m)		Sp. Conductance (umho/cm)	
Temp (C)	20.82	pH 7.43			134	
Salinity (ppt)	0.06	Comments				
Latitude (Decimal Degrees)		30.5325		Longitude (Decimal Degrees)		-83.9501

☐ Comp

Collection (comp begin or grab)

Date **5/2/17** Time **12:10**

☒ Grab

Matrix (Salt, Fresh)

Temp (C)

21.28

Salinity (ppt)

0.02

Diss. Oxygen (mg/L)

1.66

pH

5.61

Sample Depts (m)

0.15

Sp. Conductance (umho/cm)

54

Comments

Bottle Group(s)

C D E



GIWA0002_05022017

STORET ↓

Wards Creek
upstream of
bridge at CR 259

GIWA0002



☐ Comp	Collection (comp begin or grab)		☒ Eastern	Collection (comp begin or grab)		Bottle Group(s) Metals Bottle
☒ Grab	Date 5/2/17	Time 12:48	☒ Central	Date	Time	
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L)		Sample Depts (m)		Sp. Conductance (umho/cm)	
Temp (C)	21.88	pH 6.82			133	
Salinity (ppt)	0.06	Comments				
Latitude (Decimal Degrees)		30.605000		Longitude (Decimal Degrees)		-83.893257

☐ Comp

Collection (comp begin or grab)

Date **5/2/17** Time **12:48**

☒ Grab

Matrix (Salt, Fresh)

Temp (C)

21.88

Salinity (ppt)

0.06

Diss. Oxygen (mg/L)

9.20

pH

6.82

Sample Depts (m)

0.05

Sp. Conductance (umho/cm)

133

Comments

Bottle Group(s)

C D E

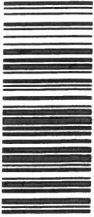


GIWA0000_05022017

STORET ↓

Caney Creek
Downstream
of 158A

GIWA0000



☐ Comp	Collection (comp begin or grab)		☒ Eastern	Collection (comp begin or grab)		Bottle Group(s) no metals bottle
☒ Grab	Date 5/2/17	Time 12:48	☒ Central	Date	Time	
Matrix (Salt, Fresh)	Diss. Oxygen (mg/L)		Sample Depts (m)		Sp. Conductance (umho/cm)	
Temp (C)	21.88	pH 6.82			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 2943

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 2943

CHLSUITE-W

Group: A Bottle Type: P-500ML # of Bottles: 4 Preservative: ICE And H2SO4 Enter Number of Bottles Sent to Lab 2943

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 2943

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 # 55067991

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: 4 Preservation: ICE

Lot # 1196409

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 # 00067590

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 # 00066993

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: 2

Container ID: P-1L

Qty: 2 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: 2 Preservation: ICE

Lot # 1196409

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 2 Preservation: HNO3

Lot # 80067590

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

Container ID: P-500ML

Qty: 2 Preservation: ICE And H2SO4

Lot # 80067590

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: 2 Preservation: ICE-FLTR

Lot # 1196409

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: 3

Container ID: P-250ML-WO-THI

Qty: 3 Preservation: ICE

Lot # L17013

Description:

Analysis

ECOLI-18QT

Description

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

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
W-SUC-AA-R
W-UHERB-AA

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 # 50066780

Description:

Analysis

PCR-HF183

Description

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