



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

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Data Qualified?
Yes / No

STORET Station Name: Sally Ward Spring at Wakulla Park Dr.

Date: 02/16/2016

(mm/dd/yyyy)

STORET Station ID: G1WA0021

Latitude: 30.2414

(Decimal Degrees)

WBID: 1006Y

RQ - 2016-02-15-27

ORG ID: 21FLWQA

Longitude: -84.3109

(Decimal Degrees)

Receiving Body of Water: Wakulla River

Field ID: G1WA0021

County: Wakulla

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Curtis Musson		X	X		X	X	3	3
Ben Ralys		X	X				2	2
Robert Wiwi		X					2	2

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 / Normal / High / Flooded Matrix: Fresh / Marine / DI
Meter ID# Biology 7 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	1:15	0.3	2m	4.02	44.7	7.45	0.16	VOB	334	20.62
CEN										

Biological Samples Collected: None HA SCI LVS RPS LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ TKN / TP / Nox / NH3 / TOC ☒ Other	☒ Ice ☐ H2SO4	SA 5259020	09/16/16	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO2			☐ <2
Filtered Nutrients	☒ oP ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
BOD	☒ BOD-INHB ☒ BOD-UNIN	☒ Ice			
Physical/Aggregate	☒ TSS / Turbidity / Alkalinity / Color ☐ Other	☒ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-LIHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Contains
1:1
Sulfuric Acid
SA-5259020
EXP: 09/16/16
Warning!
See MSDS

Adhesive Sticker(s) Here
(if Available)

Notes: Do did not pass CCV 11 J

Place Label Here
(if Available)

Signature: [Signature] Date: 2-16-16

Field Parameters Entered into LIMS: CA-2-17-16 Field Parameters QC in LIMS: BR 2/19/16

Date Migrated to STORET: [Blank] Field Sheets Scanned/Saved: MB 2/16/16/4:25

CM 5-31-16

RQ-2016-02-15-27

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 ID:

Biology 7

Project:

Wakulla

- 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 _____

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	2/15/16	1520	22.2	8.71	8.71	100.0	20.6	—	P	L
ICV	Curtis Musson	2/15/16	1524	22.3	8.69	8.68	99.9	70.6	—	P	L
CCV	Ben Roberts	2/16/16	7:34	20.81	8.95	8.95	100.0	69.6	—	P	L
CCV	Curtis Musson	2-16-16	16:42	21.60	8.64	7.84	88.9	62.5	—	P	L

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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	2/15/2016	1528	CC14162	10/15/2016	996	996	P	L
ICV	Curtis Musson	2/15/2016	1529	CC14162	10/15/2016	996	996	P	L
CCV	Ben Roberts	2/16/16	7:40	CC14162	10/15/2016	996	990	P	L
CCV	Curtis Musson	2/16/16	16:44	CC13882	7-15-2-16	101.1	102	P	L

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	2/15/2016	1532	156244	10/2017	7.0	7.00	-20.5	P	L
Calibr.	Curtis Musson	2/15/2016	1534	154634	07/2017	4.0	4.00	152.6	P	L
Calibr.	Curtis Musson	2/15/2016	1537	146934	10/2016	10.0	10.00	-193.4	P	L
ICV	Curtis Musson	2/15/2016	1539	154634	07/2017	4.0	3.97	154.7	P	L
CCV	Ben Roberts	2/16/16	741	156244	10/2017	7.0	6.99	-19.7	P	L
CCV	Curtis Musson	2/16/16	16:47	154634	07/2017	4.00	4.05	150.4	P	L

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

Request Number: RQ-2016-02-15-27

Wakulla Springs and Sally Ward Springs

Florida Department of Environmental Protection

Central Laboratory Submittal Form

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last revised Nov 10, 2015

Customer: WQAP

Requester: Benjamin Ralys

Field Report Prepared By:

Project ID: SMP

Collected By:

Benjamin Ralys

Sampling Agency:

Location Wakulla River at CR 365 Bridge		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 2-16-16 Time 3:27		☒ Eastern ☐ Central		Composite end Date Time		Bottle Group(s) (See pg 2)	
Field ID 34879		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)				1B CID	
STORET # 34879		Temp (C)		pH		Sample Depth ☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude 30.213731 ☒ dd ☐ dms		Longitude -84.261636 ☒ dd ☐ dms		Salinity (ppt)		Comments See Field Sheet for Field Measurements 2 depths					
Location Wakulla River at Boat TRAM		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 2-16-16 Time 11:05		☒ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)	
Field ID 44059		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 4.02 ☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)				1B CID	
STORET # 44059		Temp (C) 20.33		pH 7.47		Sample Depth 0.3 ☐ ft ☒ m		Sp. Conductance (umho/cm) 305			
Latitude 30.234581 ☒ dd ☐ dms		Longitude -84.294477 ☐ dd ☐ dms		Salinity (ppt) 0.15		Comments					
Location Sally Ward Spring at Wakulla Park Dr.		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 2-16-16 Time 1:15		☒ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)	
Field ID G1WA0021		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 4.02 ☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)				A	
STORET # G1WA0021		Temp (C) 20.62		pH 7.45		Sample Depth 0.3 ☐ ft ☒ m		Sp. Conductance (umho/cm) 334			
Latitude 30.2414 ☒ dd ☐ dms		Longitude -84.3109 ☒ dd ☐ dms		Salinity (ppt) 0.16		Comments					
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		☐ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)					
STORET #		Temp (C)		pH		Sample Depth ☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		Comments					

Relinquished By:	Date/Time	Shipping Method	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
							NB	2/16/16/4:25

Cooler Packing Worksheet for Request: RQ-2016-02-15-27

Wakulla Springs and Sally Ward Springs

Ship Cooler On: 2/1/2016

Customer/Project: WQAP/SMP

Requester: Benjamin Ralys

Priority: 3

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

Comments:

No preservatives needed.

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00053616

Description: Plastic Bottle 1L

Analysis

ALKALINITY
TURBIDITY
W-CL-IC
W-COLOR
W-F
W-NO2
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)
Nitrite in aqueous matrices as mg N/L
Total Dissolved Solids in aqueous matrices
Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00053616

Description: Plastic Bottle 1L

Analysis

BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1158198

Description: Brown Plastic Bottle 1L

Analysis

Description

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00063547

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 # 00063891

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 # 00053616

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-NO2

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)

Nitrite in aqueous matrices as mg N/L

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 2 Preservation: ICE

Lot # 00053616

Description: Plastic Bottle 1L

Analysis

BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 2 Preservation: ICE

Lot # 1158198

Description: Brown Plastic Bottle 1L

Analysis

CHL-CORR-W

Description

Phytoplankton chlorophyll-a (corrected for phaeophytin) and phaeophytin by spectrophotometry

Container ID: P-500ML

Qty: 2 Preservation: HNO3

Lot # 00063547

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 # 00063547

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 # 00063891

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: 2

Container ID: PT-50ML

Qty: 2 Preservation: ICE

Lot # 430897

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Bottle Group: D

of Sites: 2

Container ID: PJ-2L

Qty: 4 Preservation: Formalin

Lot # Bio-Wash

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Cooler Packed By: NRB Date: 2-8-14

DEP Cooler ID #(s): 2 coolers

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-2016-02-15-27