



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes No

WIN Station Name: Wakulla At CR 365 Bridge

Date: 4/19/2018

WIN/ Field ID: 34879

WBID: 1006

Latitude: 30.21373

(mm/dd/yyyy)

County: Wakulla

ORG ID: 21FLWQA

Longitude: -84.26163

(Decimal Degrees)

Receiving Body of Water: St. Marks River

RQ-2018- 04-16-17

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
John Woods									
Jade									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	

Depth Measured with _____
Equipment ID _____

Collection Method		
☐ Wading	☐ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☒ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded			Meter ID# Biology #2			Matrix: Fresh / Marine / DI				
Photos: Yes / No		Flow: No Flow / Intestinal / <u>Flowing</u> / NA			Tide: Rising/ Falling/ Slack/ NA		Tide Times: High NA Low NA			
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1135	1.8	0.3	1.8	4.65	52	7.53	0.15	306	20.73
CEN	1140		1.3	⑤	4.59	51	7.51	0.15	306	20.69

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

SBIO ID Numbers: SBIO-ID: 78335 HA-ID: RPS-ID: 8974 Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	JA7341010	10/2/18	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO3	NA7341020	12/7/18	☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSPITE-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	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers	☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Place Preservative Sticker(s) Here (If Available)

Notes:

Kit-C,
Bacteria, Tracers
SCI, RPS, LVS

↓ Location ↓

WIN ID/Field ID



34879



Wakulla River at CR 365

Signature: Geele

Date: 04/19/18

Enter Field Parameters, Verify Station ID In LIMS DMT: JB 4/20/18

QC Station ID, Field Parameters In LIMS DMT: JW 4/23/18

Scan/Save Field Sheets 4/24/18 CM

Migrate Data to WIN:

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

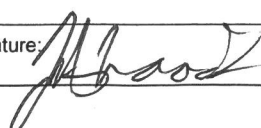
Visit ID 78335

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

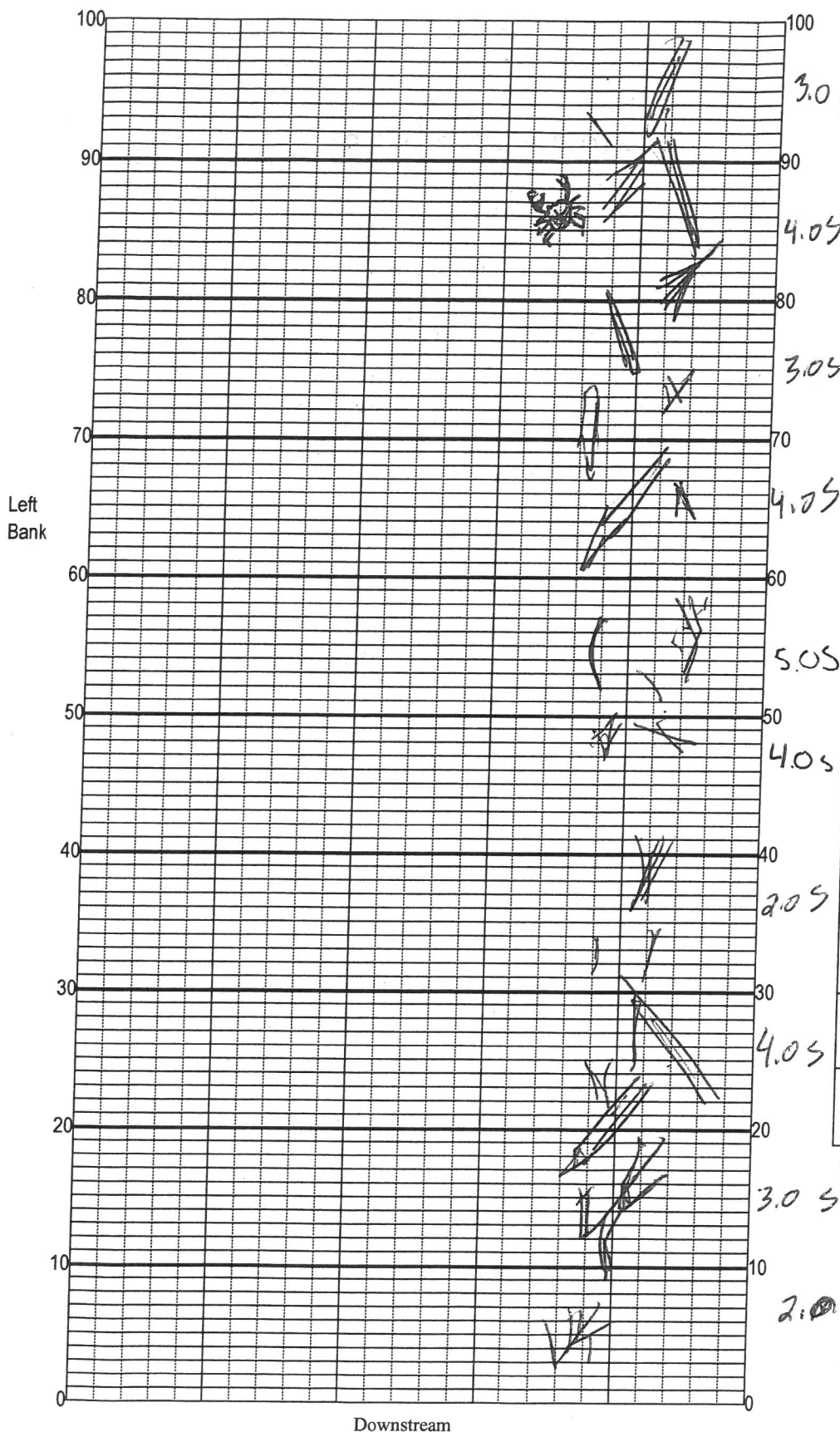
SAMPLING AGENCY: <u>21 FLWQA</u>	STORET STATION NUMBER: <u>34879</u>	DATE (MM/DD/YY): <u>04/19/18</u>	RECEIVING BODY OF WATER: <u>St. Marks</u>
REMARKS:	COUNTY: <u>Wakulla</u>	LOCATION: <u>Wakulla @ CR 365 bridge</u>	FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>10</u>	20 19 18 17 16	15 14 13 12 11	<u>10</u> 9 8 7 6	5 4 3 2 1
Substrate Availability <u>20</u>	Greater than 30% major productive habitat present at site <u>20</u> 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 <u>20</u> 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>20</u> ----- Primary Score <u>70</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. <u>20</u> 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <u>20</u>	<u>20</u> 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
Right Bank <u>10</u> Left Bank <u>10</u>	<u>10</u> 9	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>10</u> Left Bank <u>5</u>	10 9	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>75</u>	10 9	8 7 6	5 4	3 2 1

145 **TOTAL SCORE**

Date: <u>4/19/18</u>	Analyst: <u>J. Woods</u>	Signature: 
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Wakulla River @ 365

Date: 4/19/18

Sampler: S. Woods

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

S Snags 4.5

R Roots/undercut banks 0

L Leaf Packs (or mats) 0

A Aquatic Macrophytes 75%

_____ %

_____ %

_____ total # observed = _____
_____ # range expected = _____

Average width 75 m

Average depth 1.5 m

Velocity measured at 50 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

34 750

2.0 S

Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 21FLWQA LATITUDE _____
 COUNTY Wakulla STORET # _____ LONGITUDE _____
 DATE 4/19/18 TIME 1135 SAMPLING AGENCY _____
 SITE NAME Wakulla @ CR 365 Bridge
 FIELD ID/NAME 34879 RECEIVING BODY OF WATER St marks

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>25</u> Silviculture <u>30</u> Field/Pasture <u>45</u> Agricultural <u>45</u> Residential <u>45</u> Commercial <u>45</u> Industry <u>45</u> Other (Specify) <u>45</u>							Landscape Development Intensity Index (LDI) <u>45</u>
Local Watershed Erosion (select one): ☒ None ☐ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy				Typical Width (m) Depth (m)/Velocity (m/sec) Transect <u>75</u> m wide <u>0.4</u> m/s <u>0.5</u> m/s <u>0.5</u> m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>6-12</u> Right Bank: <u>718</u>				Hydrologic Modification Score (per FT 3101) <u> </u>			
High Water Mark: <u>0</u> + <u>1.8</u> = <u>1.8</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No			
Artificially ☒ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☐ Recent, severe				Canopy Cover % ☒ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☐ Moderate Shaded (46-80%)			

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse		Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify): _____		Smothering of Substrates Sand Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Silt Smothering: None ☒ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐																																									
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon			WATER QUALITY																																										
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ABUNDANCE			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐																																										
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SAMPLING TEAM <u>J. Woods, J. Burtchett</u>			SIGNATURE: <u>Gale R</u>																																										
			DATE: <u>04/19/18</u>																																										

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Wakulla @ CR 365 bridge County: Wakulla Date: 4/19/18 Investigators: J. Woods

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover

STORET Station Number: 34879

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	✓	
	2	↓	✓	
	3	↓	✓	
	4	↓	✓	
	5	3	✓	0
	6	3	✓	
	7	N	✓	
	8	↓	✓	
	9	↓	✓	
10	1	N	✓	
	2	↓	✓	
	3	↓	✓	
	4	↓	✓	
	5	3	✓	0
	6	N	✓	
	7	↓	✓	
	8	↓	✓	
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20	1	N	✓	
	2	↓	✓	
	3	↓	✓	
	4	↓	✓	
	5	↓	✓	0
	6	↓	✓	
	7	↓	✓	
	8	↓	✓	
	9	↓	✓	
30	1	N	✓	
	2	↓	✓	
	3	↓	✓	
	4	↓	✓	
	5	↓	✓	0
	6	↓	✓	
	7	↓	✓	
	8	↓	✓	
	9	↓	✓	
40	1	N	✓	
	2	↓	✓	
	3	↓	✓	
	4	↓	✓	
	5	↓	✓	0
	6	3	✓	
	7	3	✓	
	8	N	✓	
	9	N	✓	
50	1	N	✓	
	2	↓	✓	
	3	↓	✓	
	4	↓	✓	
	5	↓	✓	0
	6	↓	✓	
	7	↓	✓	
	8	↓	✓	
	9	↓	✓	

Secchi depth 1.8
Estimated? ✓

points ranked 4-6 0
total points assessed ✓
% points ranked 4-6 ✓

Check accompanying data collected at same site/date.
Algal mat sample ✓
Linear Veg Survey ✓
Habitat Assessment ✓
SCI/Biorecon ✓
Water sample ✓
RQ- 04-16-17

Algal Thickness Rank	
N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm

Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.
Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.
Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.
Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

[illegible]

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WAS-SECT

Requester: Curtis Musson

Project ID: BMAP

Collected By:

J. Woods, J. Burchett

Field Report Prepared By:

J. Burchett

Sampling Agency:

FDEP

Location		WIN ID/Field ID		↓ Location ↓		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID	WIN/STORET #	dd	dms	dd	dms	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L	% sat	Total Res. Chlorine	(See pg 2)
Latitude	30.21373	dd	dms	dd	dms	Temp (C)	pH	Temp (C)	pH	Sample Depth	306
Longitude	-84.26163	dd	dms	dd	dms	Salinity (ppt)	Comments	Salinity (ppt)	Comments	Sp. Conductance (umho/cm)	A, B
Location											
Field ID	WIN/STORET #	dd	dms	dd	dms	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen <td>mg/L<td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td></td>	mg/L <td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td>	% sat <td>Total Res. Chlorine<td>Bottle Group(s)</td></td>	Total Res. Chlorine <td>Bottle Group(s)</td>	Bottle Group(s)
Latitude		dd	dms	dd	dms	Temp (C)	pH	Temp (C)	pH	Sample Depth	
Longitude		dd	dms	dd	dms	Salinity (ppt)	Comments	Salinity (ppt)	Comments	Sp. Conductance (umho/cm)	
Location											
Field ID	WIN/STORET #	dd	dms	dd	dms	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen <td>mg/L<td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td></td>	mg/L <td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td>	% sat <td>Total Res. Chlorine<td>Bottle Group(s)</td></td>	Total Res. Chlorine <td>Bottle Group(s)</td>	Bottle Group(s)
Latitude		dd	dms	dd	dms	Temp (C)	pH	Temp (C)	pH	Sample Depth	
Longitude		dd	dms	dd	dms	Salinity (ppt)	Comments	Salinity (ppt)	Comments	Sp. Conductance (umho/cm)	
Location											
Field ID	WIN/STORET #	dd	dms	dd	dms	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen <td>mg/L<td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td></td>	mg/L <td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td>	% sat <td>Total Res. Chlorine<td>Bottle Group(s)</td></td>	Total Res. Chlorine <td>Bottle Group(s)</td>	Bottle Group(s)
Latitude		dd	dms	dd	dms	Temp (C)	pH	Temp (C)	pH	Sample Depth	
Longitude		dd	dms	dd	dms	Salinity (ppt)	Comments	Salinity (ppt)	Comments	Sp. Conductance (umho/cm)	
Location											
Field ID	WIN/STORET #	dd	dms	dd	dms	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen <td>mg/L<td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td></td>	mg/L <td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td>	% sat <td>Total Res. Chlorine<td>Bottle Group(s)</td></td>	Total Res. Chlorine <td>Bottle Group(s)</td>	Bottle Group(s)
Latitude		dd	dms	dd	dms	Temp (C)	pH	Temp (C)	pH	Sample Depth	
Longitude		dd	dms	dd	dms	Salinity (ppt)	Comments	Salinity (ppt)	Comments	Sp. Conductance (umho/cm)	
Location											
Field ID	WIN/STORET #	dd	dms	dd	dms	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen <td>mg/L<td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td></td>	mg/L <td>% sat<td>Total Res. Chlorine<td>Bottle Group(s)</td></td></td>	% sat <td>Total Res. Chlorine<td>Bottle Group(s)</td></td>	Total Res. Chlorine <td>Bottle Group(s)</td>	Bottle Group(s)
Latitude		dd	dms	dd	dms	Temp (C)	pH	Temp (C)	pH	Sample Depth	
Longitude		dd	dms	dd	dms	Salinity (ppt)	Comments	Salinity (ppt)	Comments	Sp. Conductance (umho/cm)	
Location											

Relinquished By:

JB JW

Date/Time

4/14/18:1425

Shipping Method

+1D

Number of Coolers Shipped:

1

Received By:

Date/Time

4/19/18 1430

Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ECOLI-18QT						
Group: A	Bottle Type:	BG-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	W-E8321-DI						
	W-E8321-MS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP						
	W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	PT-50ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALGAL_ID						
Group: B	Bottle Type:	PJ-2L	# of Bottles: 4	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	2
	MI-FW-QLCD						

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 ID: E203

RQ:

Project: Z1ST1804

- Notes:** (1) Always wait for meter to stabilize before recording any readings.
 (2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
 (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 12/17

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.	J. Burckett	4/19/18	803	21.2	8.88	8.88	100	—	1.05	☒ P / ☒ F	☒ L / ☒ F
ICV	↓	↓	813	21.6	8.81	8.82	100	—	—	☒ P / ☒ F	☒ L / ☒ F
CCV	↓	↓	1433	25.0	8.28	8.28	100	—	—	☒ P / ☒ F	☒ L / ☒ F
CCV										P / F	L / F

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.	J. Burckett	4/19/18	805	180116B	01/19	1000	1000	☒ P / ☒ F	☒ L / ☒ F
ICV	↓	↓	815	2710781	09/19	100	96	☒ P / ☒ F	☒ L / ☒ F
CCV	↓	↓	1435	2710781	09/19	100	95	☒ P / ☒ F	☒ L / ☒ F
CCV			1439	180116B	01/19	1000	998	☒ P / ☒ F	☒ L / ☒ F

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.	J. Burckett	4/19/18	807	171121A	06/19	7.0	7.0	-43.3	☒ P / ☒ F	☒ L / ☒ F
Calibr.	↓	↓	809	180116D	01/19	4.0	4.0	135.9	☒ P / ☒ F	☒ L / ☒ F
Calibr.	↓	↓	811	180221E	09/19	10.0	10.0	-203.3	☒ P / ☒ F	☒ L / ☒ F
ICV	↓	↓	817	140221E	09/19	10.0	10.0	-206.0	☒ P / ☒ F	☒ L / ☒ F
CCV			1437	180116D	01/19	4.0	4.1	126.9	☒ P / ☒ F	☒ L / ☒ F
CCV									P / F	L / F

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 ;

If mV are recorded: slope from 7 to 10 160, slope from 4 to 7 179.2 (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification 12/17

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value meters	Pass / Fail	Lab / Field
Pressure mode in air						P / F	L / F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Cooler Packing Worksheet for Request: RQ-2018-04-16-17

Wakulla BMAP

Ship Cooler On: 4/12/2018

Customer/Project: WAS-SECT/BMAP

Assigned To: REAVES_S

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Freshwater Kit, Metals, E. coli, Tracers

Group B: SCI, Algal ID

Requested Analyses:

Bottle Group: A

of Sites: 2

Container ID: P-1L

Qty: 2 Preservation: ICE

Lot # 00070681

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 # 1223623

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-250ML-WO-THI

Qty: 2 Preservation: ICE

Lot # L18006

Description:

Analysis

ECOLI-18QT

Description

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

Container ID: BG-500ML

Qty: 2 Preservation: ICE

Lot # 00067841

Description: Brown Glass Bottle 500ML

Affix BLUE dot to container.

Analysis

W-E8321-DI

W-E8321-MS

Description

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 2 Preservation: HNO3

Lot # 00070631

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 # 0006

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

00070631

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: FILTER-ICE

Lot # 00069731

Description: Plastic Bottle 125 mL

00069732

Analysis

W-PO4-F

Description

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

Bottle Group: B

of Sites: 2

Container ID: PT-50ML

Qty: 2 Preservation: ICE

Lot # 37

Description: Plastic Tube 50 mL

03775003

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Container ID: PJ-2L

Qty: 4 Preservation: Formalin

Lot # BLOWASH

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

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

Cooler Packed By: SR

Number of Coolers: 2

Date: 4-7-18

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☐ FedEx Bills, if applicable
- ☒ Plastic Bags
- ☐ Zip Ties

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2018-04-16-17