



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

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Data Qualified?

Yes / No

March 2017

Location/STORET Station Name: Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring Date: 9/26/17

(mm/dd/yyyy)

STORET # G2WA0007WBID: 180ALatitude: 30.787

(Decimal Degrees)

County: JacksonRQ - 2017-09-11-17ORG ID: 21FLWQALongitude: -85.1459

(Decimal Degrees)

Receiving Body of Water: Chipola RiverField ID: G2WA0007

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson						X	X	X	
Ben Ralys					X	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 / Pooled / Low / <u>Normal</u> / High / Flooded										Matrix: <u>Fresh</u> / Marine / DI	
Meter ID# <u>Biology #2</u>				Photos: Yes / <u>No</u>				Tide Falling: Yes / No / <u>NA</u>			
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°)	
<u>EST</u>	<u>10:10</u>	<u>0.3</u>	<u>1.5</u>	<u>7.81</u>	<u>87.2</u>	<u>7.15</u>	<u>0.13</u>	<u>VOB</u>	<u>278</u>	<u>20.74</u>	
<u>CEN</u>	<u>10:13</u>	<u>1.0</u>		<u>7.85</u>	<u>87.5</u>	<u>7.29</u>	<u>0.13</u>		<u>278</u>	<u>20.64</u>	

Biological Samples Collected: <u>None</u> HA SCI <u>RPS</u> <u>Algae</u> ID <u>LVS</u> <u>LVI</u> Other									
SBIO ID Numbers: SBIO-ID: <u>77945</u> RPS-ID: <u>8819</u> Macrophyte-ID: <u>af2111</u> LIMS#: <u>1931611</u>									

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	<u>SA7163030</u>	<u>6/12/18</u>	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	<u>7080060</u>	<u>3/27/18</u>	☒ <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-Cl-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			

Contains 1:1 Sulfuric Acid
Lot No.: SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

Contains 1:1 Sulfuric Acid
Lot No.: SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

Contains 1:1 Sulfuric Acid
Lot No.: 7080060
Expires: 03/27/18
Warning

Notes:		STORET ↓		Field ID →	
Kit C, RPS	Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring		<u>G2WA0007</u>	Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring	<u>Sept 26, 2017</u>
Signature: <u>B. Ralys</u>		Date: <u>9/26/17</u>		Date: <u>9/26/17</u>	

Field Parameters Entered into LIMS: DT 9/27/17

(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved: DT 9/27/17

(Initials/Date)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Memphis will pond 600 meters downstream of Jackson Blue spring

County: Jackson

Date: 9/26/17

Investigators: Ben Roberts, Curtis Musson

STORET Station Number: G2WA0007

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	X	Y		60	1	X	Y	
	2	N				2	N		
	3	N				3	N		
	4	N				4	6		
	5	N		0		5	6		0
	6	6				6	5		
	7	N				7	6		
	8	N				8	N		
	9	X				9	N		
10	1	X			70	1	X		
	2	5				2	N		
	3	6				3	N		
	4	N				4	N		
	5	6		0		5	6		0
	6	N				6	6		
	7	N				7	6		
	8	N				8	6		
	9	X				9	N		
20	1	X			80	1	X		
	2	N				2	N		
	3	N				3	N		
	4	N				4	6		
	5	6		0		5	6		0
	6	N				6	N		
	7	6				7	5		
	8	6				8	6		
	9	X				9	N		
30	1	X			90	1	X		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	6		0		5	N		0
	6	6				6	6		
	7	5				7	N		
	8	5				8	6		
	9	X				9	X		
40	1	X			100	1	X		
	2	N				2	N		
	3	6				3	N		
	4	6				4	N		
	5	5		0		5	6		0
	6	5				6	6		
	7	5				7	N		
	8	6				8	N		
	9	X				9	X		
50	1	X							
	2	N							
	3	N							
	4	N							
	5	6							
	6	N							
	7	6							
	8	6							
	9	X							

Secchi depth: VOR
Estimated?: 1.5 meters

points ranked 4-6:
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-

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

SBIO: 77945
LMS: 1931611
RPS: 8819

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%.

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 #2

RQ: 2017-09-11-17

Project: BMAP

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 _____

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	9/26/17	657	21.96	8.744	8.75	100.0	52	—	P/F	L/F
ICV	Curtis Musson	9/26/17	658	21.94	8.761	8.76	100.0	52	—	P/F	L/F
CCV	Curtis Musson	9/26/17	1455	23.53	8.498	8.51	100.1	52	—	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.	Curtis Musson	9/26/17	700	170310D	03/2018	1000	1000	P/F	L/F
ICV	Curtis Musson	9/26/17	701	170310D	03/2018	1000	1000	P/F	L/F
CCV	Curtis Musson	9/26/17	1457	170614D	6/2018	100	104	P/F	L/F
CCV								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.	Curtis Musson	9/26/17	702	170310B	9/2018	7.0	7.00	35	P/F	L/F
Calibr.	Curtis Musson	9/26/17	704	170614A	6/2018	4.01	4.01	206	P/F	L/F
Calibr.	Curtis Musson	9/26/17	706	170310C	9/2018	10.01	9.96	-120	P/F	L/F
ICV	Curtis Musson	9/26/17	707	170310C	9/2018	10.01	9.93	-118	P/F	L/F
CCV	Curtis Musson	9/26/17	1454	170310B	9/2018	7.00	7.01	40.5	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 _____, slope from 4 to 7 _____ (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 _____

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	Curtis Musson	9/26/17	709	0.000	0.000	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:

Request Number: 2017-09-11-17
Merritt's Mill Pond
Customer: WAS-SECT
Project ID: BMAP

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Requester: Curtis Musson

Request Number: 2017-09-11-17
Merritt's Mill Pond
Customer: WAS-SECT
Project ID: BMAP

Requester: Curtis Musson, Ben Ralls

Loc: STORET →
Merritt's Mill Pond
500 meters upstream
of dam
G2WA0000 00262017

File: Field IC →
Merritt's Mill Pond
500 meters
upstream o' dam
Sept 26, 2017
G2WA0000 00262017

Loc: Merritt's Mill Pond STORET ↓
mid under
powerlines
G1WA0000

File: Field IC →
Merritt's Mill
Pond mid
under powerlines
Sept 26, 2017
G2WA0000 00262017

Loc: Merritt's Mill Pond STORET ↓
600 meters
downstream of
Jackson Blue Spring
G1WA0000

File: Field IC →
Merritt's Mill Pond
600 meters
downstream of
Jackson Blue
Spring
Sept 26, 2017
G2WA0000 00262017

Relinquished By: Curtis Musson
Date/Time: 9-26-17 / 1240

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 9-26-17 Time 930	☒ Eastern ☐ Central	Collection (comp begin or grab) Date /	Bottle Group(s)
Matrix (Salt, Fresh) Fresh	Diss. Oxygen (mg/L) 10.68			
Temp (C) 26.05	pH 8.55	Sample Deps (m) 0.3	Sp. Conductance (umho/cm) 271	A
Salinity (ppt) 0.13	Comments			
Latitude (Decimal Degrees) 30.755		Longitude (Decimal Degrees) -85.1881		

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 9-26-17 Time 950	☒ Eastern ☐ Central	Collection (comp begin or grab) Date /	Bottle Group(s)
Matrix (Salt, Fresh) Fresh	Diss. Oxygen (mg/L) 9.33			
Temp (C) 24.36	pH 7.71	Sample Deps (m) 0.3	Sp. Conductance (umho/cm) 274	A
Salinity (ppt) 0.13	Comments			
Latitude (Decimal Degrees) 30.7698		Longitude (Decimal Degrees) -85.1731		

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 9-26-17 Time 10:10	☒ Eastern ☐ Central	Collection (comp begin or grab) Date /	Bottle Group(s)
Matrix (Salt, Fresh) Fresh	Diss. Oxygen (mg/L) 7.81			
Temp (C) 20.74	pH 7.15	Sample Deps (m) 0.3	Sp. Conductance (umho/cm) 228	A, B
Salinity (ppt) 0.13	Comments RPS, ALGAL-ID			
Latitude (Decimal Degrees) 30.787		Longitude (Decimal Degrees) -85.1459		

Number of Coolers 1		Received By:	Date/Time 9-26-17 / 12:48
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Group: A	Bottle Type:	P-1L	# of Bottles: 3	Preservative: ICE	Enter Number of Bottles Sent to Lab <u>3 of 3</u>
	ALKALINITY				
	TURBIDITY				
	W-CL-IC				
	W-COLOR				
	W-F				
	W-SO4-IC				
	W-TDS				
	W-TSS				
Group: A	Bottle Type:	BP-1L	# of Bottles: 3	Preservative: ICE	Enter Number of Bottles Sent to Lab <u>3 of 3</u>
	CHLSUITE-W				
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	Preservative: HNO3	Enter Number of Bottles Sent to Lab <u>3 of 3</u>
	W-ICP				
	W-ICPMS				
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab <u>3 of 3</u>
	W-NH3				
	W-NO2NO3				
	W-S-A-TP				
	W-TKN				
	W-TOC				
Group: A	Bottle Type:	P-125ML	# of Bottles: 3	Preservative: ICE-FLTR	Enter Number of Bottles Sent to Lab <u>3 of 3</u>
	W-PO4-F				
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab <u>1 of 1</u>
	ALGAL_ID				

Cooler Packing Worksheet for Request: RQ-2017-09-11-17

Merritts Mill Pond BMAP

Ship Cooler On: 8/28/2017

Customer/Project: WAS-SECT/BMAP

Assigned To: GREENWOOD_J

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 With Metals

Group B: Algal ID

Requested Analyses:

Bottle Group: A

of Sites: 3

Container ID: P-1L

Qty: 3 Preservation: ICE

Lot # 00068657

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: 3 Preservation: ICE

Lot # 1196409

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 3 Preservation: HNO3

Lot # 00068654

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: 3 Preservation: ICE And H2SO4

Lot # 00068654

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: 3 Preservation: ICE-FLTR

Lot # 00067688

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: PT-50ML

Qty: 1 Preservation: ICE

Lot # 03715003

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Cooler Packed By:

J.D.

Number of Coolers:

1

Date:

8/30/17

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-2017-09-11-17