



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Date Qualified?

Yes / No

WIN Station Name: Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring Date: 3/14/2018

WIN/ Field ID: G2WA0007 WBID: 180A Latitude: 30.787

County: Jackson ORG ID: 21FLWQA Longitude: -85.1459

Receiving Body of Water: Chipola River RQ-2018- 03-12-52

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson									
Blake Spencer									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>Sonar #1</u>		
Equipment ID		

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# Biology #2 Matrix: Fresh / Marine / DI

Photos: Yes / No Flow: No Flow / Intestinal / Flowing / 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	1107	1.3	0.3	VOB	9.03	99.9	7.89	0.13	278	20.33
CEN										

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

SBIO ID Numbers: SBIO-ID: 78280 HA-ID: RPS-ID: 8937 Macrophyte-ID: LIMS#: 1974871

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	<u>SA7341020</u>	<u>12/7/18</u>	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	<u>NA7261120</u>	<u>9/18/18</u>	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	<u>10827054</u>		
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	☐ 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			

Notes: Kit-C RPS

Signature: [Signature] Date: 3/14/18

WIN ID/ Field ID: Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring G2WA0007

Enter Field Parameters, Verify Station ID In LIMS DMT: 3/15/18 QC Station ID, Field Parameters In LIMS DMT: CN 4/10/18

Scan/Save Field Sheets CN 4/10/18 Migrate Data to WIN: Verify Data In WIN:

SBIO ID: 78280 RPS ID: 8937

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Merritt's Mill Pond 600 m downstream of Jackson Blue Spring County: Jackson Date: 3/14/2018 Investigators: Blake Spencer + Curtis Mussen

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	N	N		60	1	N	N	
	2	N				2	N		
	3	6				3	N		
	4	N				4	N		
	5	N				5	N		
	6	N	6			6	N	6	
	7	6				7	N		
	8	N				8	N		
	9	N				9	N		
10	1	N	N		70	1	N		
	2	6				2	6		
	3	6				3	6		
	4	N				4	N		
	5	6				5	N		
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	N		
20	1	N	N		80	1	N		
	2	N				2	N		
	3	6				3	N		
	4	N				4	6		
	5	N				5	N		
	6	N				6	N		
	7	6				7	N		
	8	6				8	N		
	9	6				9	N		
30	1	N			90	1	N		
	2	N				2	N		
	3	N				3	N		
	4	6				4	6		
	5	6				5	N		
	6	N				6	N		
	7	6				7	N		
	8	N				8	N		
	9	N				9	N		
40	1	N			100	1	N		
	2	N				2	N		
	3	6				3	N		
	4	N				4	N		
	5	N				5	N		
	6	6				6	N		
	7	6				7	N		
	8	6				8	N		
	9	N				9	N		
50	1	N				1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N				5	N		
	6	6				6	N		
	7	6				7	N		
	8	N				8	N		
	9	N				9	N		

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%.

Secchi depth 103
Estimated? NO

points ranked 4-6 24
total points assessed 86
% points ranked 4-6 28

(Exclude X's)

Check accompanying data collected at same site/date.

Algal mat sample X
Linear Veg Survey NO
Habitat Assessment NO
SCI/Biorecon NO
Water sample YES

RQ-2018-03-12-52

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

(> 3 considered smothered)

(N to 1 mm)

(3) 6mm

(4) 20mm

(5) 10cm

(6)

Entered by: Blake Spencer
3/15/18

QC CM 4/10/18

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: Biology #2

RQ:

Project: Merritt's M-1 / Pond 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.	Blake Spencer	3/14/18	0701	20.92	8.932	8.93	100.0	55.3		☒ P / ☐ F	☒ L / ☐ F
ICV	Blake Spencer	3/14/18	0703	20.88	8.932	8.94	100.0	55.3		☒ P / ☐ F	☒ L / ☐ F
CCV	Blake Spencer	3/14/18	1445	21.00	8.915	9.05	101.5	53.3		☒ P / ☐ F	☒ L / ☐ F
CCV										P / F	L / F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

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.	Blake Spencer	3/14/18	0705	171005D	10/20/18	1000	1000	☒ P / ☐ F	☒ L / ☐ F
ICV	Blake Spencer	3/14/18	0708	171005D	10/20/18	1000	999	☒ P / ☐ F	☒ L / ☐ F
CCV	Blake Spencer	3/14/18	1447	171005E	10/20/18	100	101	☒ 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.	Blake Spencer	3/14/18	0710	171005B	04/20/19	7.0	7.00	0.7	☒ P / ☐ F	☒ L / ☐ F
Calibr.	Blake Spencer	3/14/18	0721	171005A	10/20/18	4.0	4.00	174.6	☒ P / ☐ F	☒ L / ☐ F
Calibr.	Blake Spencer	3/14/18	0724	171005C	04/20/19	10.0	10.00	164.3	☒ P / ☐ F	☒ L / ☐ F
ICV	Blake Spencer	3/14/18	0726	171005C	04/20/19	10.0	10.00	164.3	☒ P / ☐ F	☒ L / ☐ F
CCV	Blake Spencer	3/14/18	1449	171005B	04/20/19	7.0	6.99	3.9	☒ 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 _____, 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						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:

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WAS-SECT

Requester: Curtis Musson

Field Report Prepared By:

Project ID: BMAP

Collected By:

Curtis Musson

Sampling Agency:

FDEP

Location		Merritt's Mill Pond		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID	WIN/Field ID	3-14-18		Time 0913		Date		Time	
WIN/STORET #	500 meters	Fresh		Diss. Oxygen 132.1		mg/L		Total Res. Chlorine	
Latitude	upstream of dam	pH 8.22		Sample Depth 0.3		ft		Sp. Conductance	
		Salinity 0.13		ppt		m		(umho/cm)	
Comments									
Location		Merritt's Mill Pond		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID	WIN ID/Field ID	3-14-18		Time 1041		Date		Time	
WIN/STORET #	mid under powerlines	Fresh		Diss. Oxygen 119.8		mg/L		Total Res. Chlorine	
Latitude		pH 8.27		Sample Depth 0.3		ft		Sp. Conductance	
		Salinity 0.13		ppt		m		(umho/cm)	
Comments									
Location		Merritt's Mill Pond		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID	WIN ID/Field ID	3-14-2018		Time 1107		Date		Time	
WIN/STORET #	600 meters downstream of Jackson Blue Spring	Fresh		Diss. Oxygen 99.9		mg/L		Total Res. Chlorine	
Latitude		pH 7.89		Sample Depth 0.3		ft		Sp. Conductance	
		Salinity 0.13		ppt		m		(umho/cm)	
Comments									
Location		Merritt's Mill Pond		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID	WIN/Field ID	3-14-2018		Time		Date		Time	
WIN/STORET #		Diss. Oxygen		mg/L		Total Res. Chlorine			
Latitude		pH		Sample Depth		ft		Sp. Conductance	
		Salinity		ppt		m		(umho/cm)	
Comments									
Location		Merritt's Mill Pond		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID	WIN/Field ID	3-14-2018		Time		Date		Time	
WIN/STORET #		Diss. Oxygen		mg/L		Total Res. Chlorine			
Latitude		pH		Sample Depth		ft		Sp. Conductance	
		Salinity		ppt		m		(umho/cm)	
Comments									

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Curtis Musson	3-14-2018/1420	Drop off	1	[Signature]	3-14-18/1425

Group: A	Bottle Type: P-1L	# of Bottles: 3	Preservative: ICE	Enter Number of Bottles Sent to Lab	3
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	3
CHLSUITE-W					
Group: A	Bottle Type: P-500ML	# of Bottles: 3	Preservative: HNO3	Enter Number of Bottles Sent to Lab	3
W-ICP W-ICPMS					
Group: A	Bottle Type: P-500ML	# of Bottles: 3	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	3
W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC					
Group: A	Bottle Type: P-125ML	# of Bottles: 3	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	3
W-PO4-F					
Group: B	Bottle Type: PT-50ML	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab	2
ALGAL_ID					

Cooler Packing Worksheet for Request: RQ-2018-03-12-52

Merritts Mill Pond BMAP

Ship Cooler On: 3/8/2018

Customer/Project: WAS-SECT/BMAP

Assigned To: GREENWOO_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 # 00070298

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 # 1214297

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 # 00070440

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 # 00070440

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: FILTER-ICE

Lot # 00068595

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: PT-50ML

Qty: 2 Preservation: ICE

Lot # 03775003

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Cooler Packed By:

90.

Number of Coolers:

1

Date:

3/5/18

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-2018-03-12-52