



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Merritt's Mill Pond 500 meters upstream of dam Date: 03/12/2019

WIN/ Field ID: G2WA0009 WBID: 180A Latitude: 30.755
(mm/dd/yyyy) (Decimal Degrees)

County: Jackson ORG ID: 21FLWQA Longitude: -85.1881
(Decimal Degrees)

Receiving Body of Water: Chipola River RQ- 2019-03-11-22

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
Curtis Musson		☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole
Blake Spencer		☒	☒	☒	☒	☒	☐ 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	9:27	2.0	0.3	VOB	8.71	98.6	7.84	0.13	275	21.43
CEN	9:35		1.5		8.69	98.3	7.82	0.13	275	21.42

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

SBIO ID Numbers: SBIO-ID: 77251 HA-ID: RPS-ID: Macrophyte-ID: LIMS#: 2069063

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>8274050</u>	<u>10/01/19</u>	<u>X</u> <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	<u>8080070</u>	<u>3/21/19</u>	<u>X</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-BR-IC / 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-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ W-E8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes: Nutrients Metals RPS Algal ID

WIN ID / FILED ID → G2WA0009

Location: Merritt's Mill Pond 500 meters upstream of dam

Signature: C. Spencer Date: 3-12-2019

LIMS EVENT ID: WAS-SECT-2019-03-12-01 WIN Import ID: AWM 4/5/19

Enter Field Parameters, Verify Station ID in LIMS DMT: AWM 4/5/19 QC Station ID, Field Parameters in LIMS DMT: AWM 4/5/19

Scan/Save Field Sheets AWM 4/5/19 Migrate Data to WIN: AWM 4/5/19 Verify Data in WIN: AWM 4/5/19

Entered by: ~~882~~ 3/14/19
QC by: AWM 4/15/19

SRI0: 79251 ✓ RPS: 9265 ✓

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Merritt's Mill Pond 500m upstream of dam					County: Jackson		Date: 3/12/19		Investigators: Curtis Musson ✓	
STORET Station Number: 62WA0009										
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	
70	1	X ✓	X ✓	76 cm	70	1	X	X	76 cm	
	2	X ✓	X ✓							
	3	X ✓	X ✓							
	4	X ✓	X ✓							
	5	X ✓	X ✓							
	6	X ✓	X ✓							
	7	X ✓	X ✓							
	8	X ✓	X ✓							
	9	X ✓	X ✓							
107	1	X	X	76 cm	107	1	X	X	76 cm	
	2	X	X							
	3	X	X							
	4	X	X							
	5	X	X							
	6	X	X							
	7	X	X							
	8	X	X							
	9	X	X							
20	1	X	X	76 cm	20	1	X	X	76 cm	
	2	X	X							
	3	X	X							
	4	X	X							
	5	X	X							
	6	X	X							
	7	X	X							
	8	X	X							
	9	X	X							
830	1	X	X	76 cm	830	1	X	X	76 cm	
	2	X	X							
	3	X	X							
	4	X	X							
	5	X	X							
	6	X	X							
	7	X	X							
	8	X	X							
	9	X	X							
840	1	X	X	76 cm	840	1	X	X	76 cm	
	2	X	X							
	3	X	X							
	4	X	X							
	5	X	X							
	6	X	X							
	7	X	X							
	8	X	X							
	9	X	X							
650	1	X	X	76 cm	650	1	X	X	76 cm	
	2	X	X							
	3	X	X							
	4	X	X							
	5	X	X							
	6	X	X							
	7	X	X							
	8	X	X							
	9	X	X							

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: 1.5m
Estimated?: 1.5m

points ranked 4-6: 41
total points assessed: 74
% points ranked 4-6: 55%

(Exclude X's)

Check accompanying data collected at same site/date.

Algal mat sample: X
Linear Veg Survey: ☐
Habitat Assessment: ☐
SCI/Biorecon: ☐
Water sample: X

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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)

WIN ID / FILED ID →



G2WA0009

62-160.800, F.A.C.

Location

Merritt's Mill Pond 500 meters upstream of dam

Revision Date: March 1, 2014

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: B10 #2

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Project: B map / M map

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	3/12/19	706	19.76	9.147	7.14	100.0	57		P/F	L/F
ICV	Curtis Musson	3/12/19	708	19.80	9.129	7.12	99.9	58		P/F	L/F
CCV	Curtis Musson	3/12/19	1527	22.97	8.57	8.36	97.4	64		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.	Curtis Musson	3/12/19	710	180221A	03/2019	500	500	P/F	L/F
ICV	Curtis Musson	3/12/19	711	180221A	03/2019	500	500	P/F	L/F
CCV	Curtis Musson	3/12/19	1529	1805F81	05/2020	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	3/12/19	714	180403C	10/2019	7.0	7.0	-14.7	P/F	L/F
Calibr.	Curtis Musson	3/12/19	718	180621D	7/2019	4.0	4.01	158.9	P/F	L/F
Calibr.	Curtis Musson	3/12/19	721	180621F	1/2020	10.01	10.00	-185.4	P/F	L/F
ICV	Curtis Musson	3/12/19	725	180621F	1/2020	10.01	10.00	-185.3	P/F	L/F
CCV	Curtis Musson	3/12/19	1332	180403C	10/2019	7.0	6.95	-10.4	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	3/12/19	713	0.00	0.00	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: Blake Spencer

Project ID: BMAP

Collected By: Curtis Musson + Blake Spencer

Sampling Agency: FAEP

Location	WIN ID / FILED ID → G2WA0007	Collection (comp begin or grab) Date 3/12/19 Time 1102	Composite end Date	Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 89.7	Total Res. Chlorine —
WIN/STORE #	Merritt's Mill Pond 600 meters downstream of Jackson Blue Sp	Temp (C) 20.68	pH 7.68	Sample Depth 0.3
Latitude	30.787	Salinity (ppt) 0.13	Sp. Conductance (umho/cm) 278	A
Location	WIN ID / FILED ID → G2WA0008	Collection (comp begin or grab) Date 3/12/19 Time 1102	Composite end Date	Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 89.5	Total Res. Chlorine —
WIN/STORE #	Merritt's Mill Pond mid under powerlines	Temp (C) 20.82	pH 7.77	Sample Depth 0.3
Latitude	30.7698	Salinity (ppt) 0.13	Sp. Conductance (umho/cm) 283	A
Location	WIN ID / FILED ID → G2WA0009	Collection (comp begin or grab) Date 3/12/19 Time 0927	Composite end Date	Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 98.6	Total Res. Chlorine —
WIN/STORE #	Merritt's Mill Pond 500 meters upstream of dam	Temp (C) 21.43	pH 7.84	Sample Depth 0.3
Latitude	30.755	Salinity (ppt) 0.13	Sp. Conductance (umho/cm) 275	A
Location	WIN ID / FILED ID → G2WA0009	Collection (comp begin or grab) Date 3/12/19 Time 1102	Composite end Date	Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Biological	Diss. Oxygen —	Total Res. Chlorine —
WIN/STORE #	Merritt's Mill Pond 500 meters upstream of dam	Temp (C) —	pH —	Sample Depth —
Latitude	30.755	Salinity (ppt) —	Sp. Conductance (umho/cm) —	B

Relinquished By: *Blake*Date/Time
3/12/19Shipping Method
Hand Delivered

Number of Coolers Shipped: 1

Received By: *[Signature]*Date/Time
3/12/19

3:14

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				HNO3		
	W-ICPMS				LOT# W49080070 EXP: 03/21/19		
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				H2SO4		
	W-S-A-TP				LOT# S98274050 EXP: 10/01/2019		
	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				Lot# 10022054		
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALGAL_ID						

Cooler Packing Worksheet for Request: RQ-2019-03-11-22

Merrit's Mill Pond BMAP

Ship Cooler On: 3/7/2019

Customer/Project: WAS-SECT/BMAP

Assigned To: SHAIK_A

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Nutrients, Metals x3

Group B: Algal_ID x1

Packing Notes:

No Fedex Labels

No Trash Bags

Requested Analyses:

Bottle Group: A

of Sites: 3

Container ID: P-1L

Qty: 3 Preservation: ICE

Lot # 00073319

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 using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 3 Preservation: ICE

Lot # 123847

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 # 00073297

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 # 00073297

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 # 00072954

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 # 03775003

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Cooler Packed By: MS

Number of Coolers: 1

Date: 3-5-19

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☒ FedEx Bills, if applicable
- ☒ Plastic Bags/Zip Ties
- ☒ Acid Labels (sets of 24)

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2019-03-11-22