



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?

Yes

No

WIN Station Name: Merritt's Mill Pond mid under powerlines

Date: 9/12/2018

(mm/dd/yyyy)

WIN/ Field ID: G2WA0008

WBID: 180A

Latitude: 30.7698

County: Jackson

ORG ID: 21FLWQA

Longitude: -85.1731

(Decimal Degrees)

Receiving Body of Water: Chipola River

RQ-2018- 09-10-22

(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Ben Ralys						X				☒ Sample Container	☐ Van Dorn	☐ Pole		
Curtis Musson					X		X	X		☐ Carboy	☒ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with <u>Secchi</u>				
										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: <u>Fresh</u> / Marine / DI				
Photos: Yes / <u>No</u>					Flow: No Flow / Intestinal / Flowing <u>NA</u>					Tide: Rising/ Falling/ Slack <u>NA</u>				
Tide Times: High <u>NA</u> Low <u>NA</u>														
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	10:10	2.0	0.3	Vob	10.22	122.9	7.89	0.13	283	24.63				
CEN	10:13		2.5		11.51	137.7	8.05	0.13	281	24.35				
Biological Samples Collected: None HA SCI <u>RPS</u> <u>Algae ID</u> LVS LVI Other:														
SBIO ID Numbers: SBIO-ID: <u>26865</u> HA-ID: _____ RPS-ID: <u>9090</u> Macrophyte-ID: _____ LIMS#: <u>2024639</u>														
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>8085170</u>	<u>3/26/19</u>	☒ <2					
Metals	☒ W-ICPMS ☒ W-ICP					☒ Ice ☒ HNO3	<u>73461010</u>	<u>12/7/18</u>	☒ <2					
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter					☒ Ice	<u>10825054</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-E8321-DI ☐ W-E8321-MS					☐ Ice								
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI					☐ Ice								
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA					☐ Other								

Notes:

Kit-C, RPS,
Algal ID

Merritt's Mill Pond
mid under
powerlines

WIN ID/Field ID

G2WA0008

Signature: Curtis Musson

Date: 9-12-18

Enter Field Parameters, Verify Station ID In LIMS DMT: 9/19/18

QC Station ID, Field Parameters In LIMS DMT: Cn 9-24-18

Scan/Save Field Sheets (Initials/Date)

Migrate Data to WIN: (Initials/Date)

Verify Data In WIN: (Initials/Date)

Entered by: ~~SM~~ 9/18/18
QC BY: CM 9-24-18

SRIO: 78865 RPS ID: 9090 LIMS: 2024639

Merritt's M/H DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet										
Site: Pond Mid, Under Power Lines / Tichen					County: Tichen		Date: 9/12/18		Investigators: Merritt's M/H	
STORET Station Number: 62v9000 8										
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	N		60	1	X	N		
	2	N				2	N			
	3	N				3	N			
	4	N				4	N			
	5	N		0		5	N		0	
	6	N				6	N			
	7	N				7	N			
	8	N				8	N			
	9	N				9	N			
10	1	N			70	1	N			
	2	N				2	N			
	3	N				3	N			
	4	N		0		4	N		0	
	5	N				5	N			
	6	N				6	N			
	7	N				7	N			
	8	N				8	N			
	9	N				9	N			
20	1	N			80	1	N			
	2	N				2	N			
	3	N				3	N			
	4	N		0		4	N		0	
	5	N				5	N			
	6	N				6	N			
	7	N				7	N			
	8	N				8	N			
	9	N				9	N			
30	1	N			90	1	N			
	2	N				2	N			
	3	N				3	N			
	4	N		0		4	N		0	
	5	N				5	N			
	6	N				6	N			
	7	N				7	N			
	8	N				8	N			
	9	N				9	N			
40	1	N			100	1	N			
	2	N				2	N			
	3	N				3	N			
	4	N		0		4	N		0	
	5	N				5	N			
	6	N				6	N			
	7	N				7	N			
	8	N				8	N			
	9	N				9	N			
50	1	N				1	N			
	2	N				2	N			
	3	N				3	N			
	4	N		0		4	N		0	
	5	N				5	N			
	6	N				6	N			
	7	N				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	100
Estimated?	no
# points ranked 4-6	
total points assessed	
% points ranked 4-6	
(Exclude X's)	
Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	no
Habitat Assessment	no
SCI/Biorecon	no
Water sample	X-5
RQ-	2018.09.10.22

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)

(3) 6mm

(4) 20mm

(5) 10cm

(6)

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly ~~not~~ this
data there is
qualified data on
this name

Meter ID: Biology #2 RQ- 2018-09-10-22 Project: BMAP

DO

- 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.	Ben Rahs	9/12/18	6:53	20.63	8.98	8.98	100.0	52.3	—	(P) F	(L) F
ICV	Ben Rahs	9/12/18	6:55	20.66	8.98	8.98	100.0	52.3	—	(P) F	(L) F
CCV	Ben Rahs	9/12/18	2:00	22.27	8.71	9.14	105.1	54.3	—	(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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Ben Rahs	9/12/18	6:58	180403A	4/2019	1,000	1,000	(P) F	(L) F
ICV	Ben Rahs	9/12/18	7:00	180403A	4/2019	1,000	1,000	(P) F	(L) F
CCV	Ben Rahs	9/12/18	2:15	2802833	1/2020	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.	Ben Rahs	9/12/18	7:02	180621E	1/2020	7.0	6.94	10.1	(P) F	(L) F
Calibr.	Ben Rahs	9/12/18	7:04	180510B	5/2019	4.0	4.00	183.7	(P) F	(L) F
Calibr.	Ben Rahs	9/12/18	7:06	180403D	10/2019	10.0	9.91	-144.7	(P) F	(L) F
ICV	Ben Rahs	9/12/18	7:07	180403D	10/2019	10.0	9.88	-143.5	(P) F	(L) F
CCV	Ben Rahs	9/12/18	2:20	180510B	5/2019	4.0	4.14	172.8	(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:

Merri's Mill Pond BMAP

Customer: WAS-SECT

Requester: Curtis Musson

Field Report Prepared By:

Ben Relys, Curtis wussen

Project ID: BMAP

Collected By: Ben Rahs Curtis Musson

Sampling Agency:

Location		Merritt's Mill Pond		WIN/Field ID		9:50		Eastern		Composite end		Bottle	
Field ID		500 meters		G2WA0000		9/12/18		Central		Date		Group(s)	
WIN/STORET #		upstream of dam		G2WA0000		Fresh		Diss. Oxygen		Total Res. Chlorine		(See pg 2)	
Latitude		Longitude		dd dms		Temp (C)		pH		Sample Depth		Sp. Conductance	
dd		dd		dd		26.53		8.13		0.3		275	
dms		dms		dms		Salinity (ppt)		Comments		Date		Time	
dd		dd		dd		0.13				Date		Time	
dms		dms		dms						Date		Time	
Location		Merritt's Mill Pond		WIN ID/Field ID		9:50		Eastern		Composite end		Bottle	
Field ID		mid under		G2WA0000		9/12/18		Central		Date		Group(s)	
WIN/STORET #		powerlines		G2WA0000		Fresh		Diss. Oxygen		Total Res. Chlorine		A, B	
Latitude		Longitude		dd dms		Temp (C)		pH		Sample Depth		Sp. Conductance	
dd		dd		dd		24.63		7.89		0.3		283	
dms		dms		dms		Salinity (ppt)		Comments		Date		Time	
dd		dd		dd		0.13				Date		Time	
dms		dms		dms						Date		Time	
Location		Merritt's Mill Pond		WIN ID/Field ID		9:20		Eastern		Composite end		Bottle	
Field ID		600 meters		G2WA0007		9/12/18		Central		Date		Group(s)	
WIN/STORET #		downstream of		G2WA0007		Fresh		Diss. Oxygen		Total Res. Chlorine		A	
Latitude		Longitude		dd dms		Temp (C)		pH		Sample Depth		Sp. Conductance	
dd		dd		dd		20.60		7.75		0.3		284	
dms		dms		dms		Salinity (ppt)		Comments		Date		Time	
dd		dd		dd		0.14				Date		Time	
dms		dms		dms						Date		Time	
Location		Merritt's Mill Pond		WIN ID/Field ID		9:20		Eastern		Composite end		Bottle	
Field ID		600 meters		G2WA0007		9/12/18		Central		Date		Group(s)	
WIN/STORET #		downstream of		G2WA0007		Fresh		Diss. Oxygen		Total Res. Chlorine		A	
Latitude		Longitude		dd dms		Temp (C)		pH		Sample Depth		Sp. Conductance	
dd		dd		dd		20.60		7.75		0.3		284	
dms		dms		dms		Salinity (ppt)		Comments		Date		Time	
dd		dd		dd		0.14				Date		Time	
dms		dms		dms						Date		Time	
Location		Merritt's Mill Pond		WIN ID/Field ID		9:20		Eastern		Composite end		Bottle	
Field ID		600 meters		G2WA0007		9/12/18		Central		Date		Group(s)	
WIN/STORET #		downstream of		G2WA0007		Fresh		Diss. Oxygen		Total Res. Chlorine		A	
Latitude		Longitude		dd dms		Temp (C)		pH		Sample Depth		Sp. Conductance	
dd		dd		dd		20.60		7.75		0.3		284	
dms		dms		dms		Salinity (ppt)		Comments		Date		Time	
dd		dd		dd		0.14				Date		Time	
dms		dms		dms						Date		Time	

Relinquished By: Jesse My	Date/Time 9/12/18	Shipping Method Delivered	Number of Coolers Shipped: 1	Received By: AR	Date/Time 09-12-18
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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						
						Lot: 726420	
						Exp: 09-18-18	
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						
						H2SO4	
						LOT# S48085178	
						EXP: 03/26/19	
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: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALGAL_ID						

Cooler Packing Worksheet for Request: RQ-2018-09-10-22

Merrit's Mill Pond BMAP

Ship Cooler On: 9/6/2018

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

Group B: Algal ID

Requested Analyses:

Bottle Group: A

of Sites: 3

Container ID: P-1L

Qty: 3

Preservation: ICE

Lot #

05071991

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 #

1232362

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 # 00072044

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 # 00072044

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 # 00069732

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: _____ Number of Coolers: _____ Date: _____

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-2018-09-10-22