



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

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Data Qualified?
Yes / No

Location/STORET Station Name: Merritt's Mill Pond 500 meters upstream of dam

Date: 6/14/2017

(mm/dd/yyyy)

STORET # G2WA0009

WBID: 180A

Latitude: 30.755

(Decimal Degrees)

County: Jackson RQ - 2017-06-12-67

ORG ID: 21FLWQA

Longitude: -85.1881

(Decimal Degrees)

Receiving Body of Water: Chipola River

Field ID: G2WA0009_06142017

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Curtis Musson			X			X		
Ben Ralys				X				X
Blake Spencer		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# Biology #2	Photos: Yes / <u>No</u>
	Tide Falling: Yes / No / <u>NA</u>

Field Sample

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°)
EST	10:55	0.3	2.2	9.06	112.0	7.71	0.12	V0B	259	26.19
CEN	10:58	1.7		11.33	139.2	8.02	0.12		256	25.85

Biological Samples Collected:	<u>None</u>	HA	SCI	RPS	Algae ID	LVS	<u>VI</u>	Other
SBIO ID Numbers:	SBIO-ID:	RPS-ID:	Macrophyte-ID:	LIMS#:				

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	7093010	4/3/18	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	6253070	9/9/17	☒ <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-CH-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 Nitric Acid NA-6253070 EXP: 09/09/17 Warning! See SDS

Contains 1:1 Sulfuric Acid SA-7093010 EXP: 04/03/18 Warning! See SDS

QA/QC Sample Information

Duplicate

Time Zone: EST CEN		Sample Depth (m): _____		Field ID: _____	
Time: _____		Total Depth (m): _____			
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 ☐ H ₂ SO ₄			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ < 2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll	☐ CHLSUITE-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			
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			

Blank

G2WA0008_06142017

Time Zone: EST CEN		Time: 10:25	Field ID: ↑	Location: Merritts Mill Pond	
☒ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipment ID: _____			
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 ☒ H ₂ SO ₄	7093010	4/3/18	☒ < 2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO ₃	6253070	9/9/17	☒ < 2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll	☒ CHLSUITE-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			
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	☐ Other			

Notes:

STORET →

Merritts Mill Pond
500 meters upstream
of dam

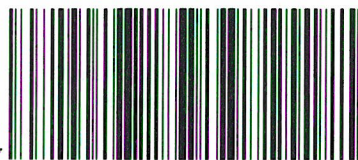


G2WA0009

Field ID →

Merritt's Mill Pond
500 meters
upstream of dam

June 14, 2017



G2WA0009 06142017

Signature:

C. C. C.

Date:

6-14-17

Field Parameters Entered into LIMS:

Cm 6-16-17

(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

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 **Biology #2**

RQ- **2017-06-12-67**

Project **BMAP**

- Notes: (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (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 **03/06/2017**

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	6-14-17	7:19	22.17	8.71	8.72	100.0	48	—	P	L
ICV	Curtis Musson	6-14-17	7:20	22.07	8.727	8.74	100.0	48	—	P	L
CCV	Blake Spencer	6/15/17	7:15	22.04	8.744	8.85	101.3	48.2	—	P	L
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	6-14-17	7:22	161111D	1/1/2017	1000	1000	P	L
ICV	Curtis Musson	6-14-17	7:23	161111D	1/1/2017	1000	1000	P	L
CCV	Blake Spencer	6/15/17	07:21	170310E	03/2018	100	103	P	L
CCV									

Report specific conductance as a whole number with no decimal figure.

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	6-14-17	7:24	170310B	9/2018	7.0	7.00	-4.5	P	L
Calibr.	Curtis Musson	6-14-17	7:26	170310A	3/2018	4.0	4.01	169	P	L
Calibr.	Curtis Musson	6-14-17	7:28	161111C	5/2018	10.0	9.98	-168	P	L
ICV	Curtis Musson	6-14-17	7:29	161111C	5/2018	10.0	9.97	-168	P	L
CCV	Blake Spencer	6/15/17	7:27	170310B	09/2018	7.00	7.08	-5.5	P	L
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

Request Number: 2017-06-12-67

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Merritt's Mill Pond

Customer: WQ-ASSESS

Project ID: BMAP

Requester: Curtis Musson

Field Report Prepared By: Curtis Musson

Sampling Agency: FDEP

Page 1 of 3

Collected By: Curtis Musson, Ben Rams

Location	Collection (comp begin or grab)	Matrix	Temp (C)	pH	Sample Depts (m)	Sp. Conductance (umho/cm)	Bottle Group(s)
Merritt's Mill Pond 600 meters Downstream of Jackson Blue Spring Field ID → Merritt's Mill Pond 600 meters Downstream of Jackson Blue Spring June 14, 2017 STORET ↓ G1WA0007 Q2WA0007_06142017	☐ Comp ☒ Grab Date 6-14-17 Time 0944 Eastern Central Collection (comp begin or grab) Date / Time /	Fresh Diss. Oxygen (mg/L) 7.90	20.67	7.66	0.3	276	A
Salinity (ppt) 0.13		Comments		Latitude (Decimal Degrees) 30.787		Longitude (Decimal Degrees) -85.1459	
Merritt's Mill Pond mid under powerlines Field ID → Merritt's Mill Pond mid under powerlines June 14, 2017 STORET ↓ G1WA0008 Q2WA0008_06142017	☐ Comp ☒ Grab Date 6-14-17 Time 10:26 Eastern Central Collection (comp begin or grab) Date / Time /	Fresh Diss. Oxygen (mg/L) 9.17	23.91	7.75	0.3	271	A
Salinity (ppt) 0.13		Comments		Latitude (Decimal Degrees) 30.7698		Longitude (Decimal Degrees) -85.1731	
Merritt's Mill Pond 500 meters upstream of dam Field ID → Merritt's Mill Pond 500 meters upstream of dam June 14, 2017 STORET → G2WA0009 Q2WA0009_06142017	☐ Comp ☒ Grab Date 6-14-17 Time 10:55 Eastern Central Collection (comp begin or grab) Date / Time /	Fresh Diss. Oxygen (mg/L) 9.06	26.19	7.71	0.3	256	A
Salinity (ppt) 0.12		Comments		Latitude (Decimal Degrees) 30.755		Longitude (Decimal Degrees) -85.1881	

Relinquished By:

Curtis Musson

Date/Time

6-14-17 / 15:27

Number of Coolers

2

Received By:

Date/Time

Request Number: 2017-06-12-67

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Lab Sample Submittal Form

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Merritt's Mill Pond

Requester: Curtis Musson

Field Report Prepared By: _____

Customer: WQ-ASSESS

Sampling Agency: FDEP

Project ID: BMAP

Collected By: _____

Location QC - DUP Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring Field ID → Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring June 14, 2017  G2WA0007_06142017		☐ Comp ☒ Grab Collection (comp begin or grab) Date 6-14-2017 Time 0953 Eastern Central		Collection (comp begin or grab) Date _____ Time _____ Eastern Central		Bottle Group(s) A
Field ID QC Blank DI Water Field ID → QC BLANK DI Water June 14, 2017  G2WA0007_06142017B		Matrix (Salt, Fresh) Fresh Diss. Oxygen (mg/L) 7.90		Sample Depts (m) 0.3		
		Temp (C) 20.67		pH 7.66		
		Salinity (ppt) 0.13		Comments DUP		
		Latitude (Decimal Degrees) 30.787		Longitude (Decimal Degrees) -85.1459		
		Matrix (Salt, Fresh) DI Water Diss. Oxygen (mg/L) BLANK		Sample Depts (m) BLANK		
		Temp (C) BLANK		pH BLANK		
		Salinity (ppt) BLANK		Comments QC Blank DI Water		
		Latitude (Decimal Degrees) BLANK		Longitude (Decimal Degrees) BLANK		

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time
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Group: A	Bottle Type:	P-1L	# of Bottles: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab	5
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab	5
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 5	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	5
	W-ICP						
	W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 5	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	5
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 5	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	5
	W-PO4-F						
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
	ALGAL_ID						

Cooler Packing Worksheet for Request: RQ-2017-06-12-67

Merritts Mill Pond BMAP

Ship Cooler On: 6/9/2017

Customer/Project: WQAP/BMAP

Assigned To: ANGULO_M

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd
MS #3525
Tallahassee, FL 32399-2400
Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Freshwater Kit With Metals

Group B: Algae_ID

4 - LlitersDI water for a field blank

No FedEx lables needed

Requested Analyses:

Bottle Group: A

of Sites: 5

Container ID: P-1L

Qty: 5 Preservation: ICE

Lot # 00062591

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: 5 Preservation: ICE

Lot # 1199138

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 5 Preservation: HNO3

Lot # 0067590

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: 5 Preservation: ICE And H2SO4

Lot # 0067590

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: 5 Preservation: ICE-FLTR

Lot # 0067688

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: Martin A. Number of Coolers: 2 Date: 06-12-17

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-2017-06-12-67