



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Merritt's Mill Pond 600 meters downstream of Jackson Blue Sp **Date:** 6/7/2021

WIN/Field ID: G2WA0007 **WBID:** 180A **ENR:** **Latitude:** 30.78886917

County: JACKSON **Org ID:** 21FLWQA **Longitude:** -85.14250969

Receiving Body of Water: Apalachicola - Chipola **RQ:** 2021-06-07-06

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

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Sonar	
Secchi Equipment ID:	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☒ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# EXO #1					
Photos: NO		Flow: NA		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☐ None ☐ HA ☐ SCI ☐ RPS ☒ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers: SBIO: 82357 RPS: 9711											
Notes:											

Duplicate Sample

Time Zone: EST	Time:	Field ID: N/A (WIN ID_DUP)
WIN DMT Activity ID:		

Blank

Time Zone:	Time:	Field ID: (Blank Type_DDDMMYY)
DI Source:	Location:	
DI Type:	Equipment ID:	
DI Container (Name/ID):		DI Container Type:

LIMS EVENT ID: WAS-SECT-2021-06-07-01 **WIN Import ID:** C[' v ! ' ! { 9/E E^E

Enter Field Parameters, Verify Station ID In LIMS DMT: SBS 6/8/21 **QC Station ID, Field Parameters In LIMS DMT:** ESB 6/8/21

(Initials/Date) (Initials/Date)

Scan/Save Field Sheets: SBS 6/8/21 **Migrate Data to WIN:** DT 7/23/21 **Verify Data In WIN:**

(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-06-07-06

Customer: WQAP

Project ID: SMP

Collected By: Curtis Musson, Blake Spencer

Field Report Prepared By: Curtis Musson

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G2WA0007

Location: Merritt's Mill Pond 600 meters downstream of Jackson Blue Sp

Comments:

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT)
6/7/2021	1046 EST	8.47	95.1	21.02	7.42	0.3	2 ☒ VOB (S)	2	277.4	0.13
	1048 EST	8.54	95.9	21.03	7.47	1.5	Central Lab please use top row for login purposes		277.4	0.13
Parameter Suite		Parameter Methods				Preservation		pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4*		☒ <2	1	C
		Lot #	Sa0353110		Exp:	1-11-22				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	C
		Lot #	Na0344060		Exp:	1-4-22				
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	C
		Filter Lot #	16930646							
		Syringe Lot #	1091364							
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	C
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	C
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice				
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC				☐ Formalin				
Periphyton (PT-50ML)		☒ ALGAE-ID				☒ Ice			1	B
Microbiology (Contract Lab Bottle)		☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab				☐ Ice				
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐				☐ Ice				
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice				
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ WE8321-MS	☒ W-PSNP-TQ	☒ W-CT-CL-R	☒ Ice			10	C
		W-PCL-SQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)		W-DIELDRIN					
Phytoplankton/Periphyton		DTM-QL-C	PEN-QL-C	DTY-QN-C	PKD-QN-C	☐ Ice				
		DTM-QN-C	PRN-QN-C	PKD-QN-BV						
Name: Curtis Musson Blake Spencer				Signature: <i>Blake Spencer</i>				Date: 6/7/21		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

SRIO: 92357 RPS: 9711

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: MMP DS of JBS					County:		Date: 6-7-21		Investigators: Curtis Musson		
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	STORET Station Number: G2WA0007	
9	1	6	Yes		9	1	6	Yes		Secchi depth 20m Estimated? 10m	
	2	6				2	N	4			
	3					3					
	4	4				4	N	4			
	5	4		0		5	N				0
	6	N				6	N	6			
	7	4				7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	6	4			
0	1	X	Yes		5	1	X	Yes		# points ranked 4-6 59 total points assessed 90 % points ranked 4-6 66%	
	2	4				2	N				
	3	4				3	N				
	4	4				4	N	4			
	5	N		0		5	6	4			0
	6	N				6	N	6			
	7	4				7	N	6			
	8	6	4			8	6	4			
	9	6	4			9	6	4			
7	1	X	Yes		8	1	X	Yes		Check accompanying data collected at same site/date. Algal mat sample ☒ Linear Veg Survey ☐ Habitat Assessment ☐ SCI/Biorecon ☐ Water sample ☒ RQ- 2021-06-07-06	
	2	4				2	N				
	3	4				3	N				
	4	4				4	N	4			
	5	N		0		5	6	4			0
	6	N				6	N	6			
	7	4				7	N	6			
	8	6	4			8	6	4			
	9	6	4			9	6	4			
8	1	X	Yes		4	1	X	Yes		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	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
20	1	X	Yes		8	1	X	Yes		60 BASS	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
5	1	X	Yes		6	1	X	Yes		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%.	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
8	1	X	Yes		8	1	X	Yes		60 BASS	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
40	1	X	Yes		4	1	X	Yes		60 BASS	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
4	1	X	Yes		5	1	X	Yes		60 BASS	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
8	1	X	Yes		8	1	X	Yes		60 BASS	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			
50	1	X	Yes		8	1	X	Yes		60 BASS	
	2	4				2	4				
	3	N				3	4				
	4	N				4	4				
	5	6		0		5	N	4			0
	6	N				6	N	6			
	7	6	4			7	6	4			
	8	6	4			8	6	4			
	9	6	4			9	N	6			

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 6/7/2021
Customer: WAS
RQ: RQ-2021-06-07-06

Collected By: Curtis Musson, Blake Spencer
Sampling Agency: FDEP
Project ID: SMP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL
FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 2

Delivery Method: HandDelivered

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
Merritt's Mill Pond 500 meters upstream of dam	 G2WA0009
Merritt's Mill Pond mid under powerlines	 G2WA0008
SHANGRI LA SPRING Vent	 G2WA0022
Merritt's Mill Pond 600 meters downstream of Jackson Blue Sp	 G2WA0007

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 6/7/2021
1440EST

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:

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

Boldly "X" this box if there are qualified data on this page.

Meter ID:

Exo #1

RQ:

2021-06-07-06

Project:

MMP 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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Blake Spencer	6/7/21	0658	22.1	758.7	8.7	8.72	99.9	—	—	P/F	L/F
ICV	Blake Spencer	6/7/21	0700	22.1	758.7	8.7	8.73	100.2	—	—	P/F	L/F
CCV	Curtis Musson	6/7/21	1456	22.2	758.5	8.7	8.93	102.6	—	—	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 (Pro DSS 0.75 to 1.50); 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.	Blake Spencer	6/7/21	0650	201209H	12/2021	1000	1000	P/F	L/F
ICV	Blake Spencer	6/7/21	0705	2911C93	11/2021	100	101.6	P/F	L/F
CCV	Curtis Musson	6/7/21	244	201209H	12/2021	1000	989	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	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Blake Spencer	6/7/21	0707	210513A	11/22	7.01	22.0	7.01	-24.6	P/F	L/F
Calibr.	Blake Spencer	6/7/21	0710	201112A	05/22	4.00	21.6	4.00	150.2	P/F	L/F
Calibr.	Blake Spencer	6/7/21	0713	200407A	10/21	10.04	21.8	10.04	-182.4	P/F	L/F
ICV	Blake Spencer	6/7/21	0716	201112A	5/22	4.00	21.6	3.99	148.5	P/F	L/F
CCV	Curtis Musson	6/7/21	247	210513A	11/2022	7.01	21.6	7.00	-18	P/F	L/F
CCV	Blake Spencer	6/7/21	1457	200407A	10/2021	10.03	22.2	10.01	-783.9	P/F	L/F

pH Acceptance criteria ± 0.2 SU;

mV pH 7 Range 0 $\pm$ 50;

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

mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	Blake Spencer	6/7/21	0720	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:

Cooler Packing Worksheet for Request: RQ-2021-06-07-06

Merrit's Mill Pond BMAP

Ship Cooler On: 6/3/2021

Customer/Project: WAS-SECT/BMAP

Assigned To: KLUG_K

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Please return
packing list with
sample submittal
forms.

Comments:

No preservatives needed.

Group A: Nutrients, Metals x3

Group B: Algal_ID x1

Group C: Nutrients, Metals, Pesticides x 1

Packing Notes:

No Fedex Labels

No Trash Bags

Sampling Note:

Group A: 2 sties

Group C: 1 site - Downstream of Jackson Blue Spring

Requested Analyses:

Bottle Group: A

of Sites: 3

Container ID: P-1L

Qty: 3

Preservation: ICE

Lot #

00079762

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 (not valid for NPDES monitoring)

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 # 1274731

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 # 00079760

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis
W-HARD
W-ICP
W-ICPMS

Description
Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
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 # 00079760

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 # 00080005

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 # 1712272

Description: Plastic Tube 50 mL

Analysis
ALGAL_ID

Description
Qualitative assessment of algal taxa present without counts

Bottle Group: C**# of Sites: 1****Container ID: P-1L****Qty: 1 Preservation: ICE****Lot #** 00079762**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 (not valid for NPDES monitoring)

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: 1 Preservation: ICE****Lot #** 1274731**Description: Brown Plastic Bottle 1L****Analysis**

CHLSUITE-W

Description

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

Container ID: BG-500ML**Qty: 1 Preservation: CH2CICOOH Pre-Preserved****Lot #** 00078941**Description: Brown Glass Bottle 500ML**

Affix BLUE dot to container.

Analysis

W-CARB-AA

Description

Carbamates in water matrices by HPLC/MS/MS

Container ID: BG-500ML**Qty: 4 Preservation: ICE****Lot #** 00080039**Description: Brown Glass Bottle 500ML**

Affix BLUE dot to container.

Analysis

W-CT-CI-R

W-PCL-TQ-R

Description

Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization

Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS

Container ID: BG-500ML**Qty: 1 Preservation: ICE****Lot #** 00079780**Description: Brown Glass Bottle 500ML**

Affix BLUE dot to container.

Analysis**Description**

W-E8321-DI
W-E8321-MS

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00079760

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-HARD
W-ICP
W-ICPMS

Description

Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
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: 1 Preservation: ICE And H2SO4

Lot # 00079760

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: 1 Preservation: FILTER-ICE

Lot # 00080005

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Container ID: BG-1L

Qty: 4 Preservation: ICE

Lot # 00079237

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-PSNP-TQ

Description

Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Cooler Packed By: WZ Number of Coolers: 2 Date: 6.3.21

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	<u>MCAA Buffer soln</u>	Exp	<u>2.9.22</u>	Lot #	<u>118437</u>
ID		Exp		Lot #	
ID		Exp		Lot #	
ID		Exp		Lot #	
ID		Exp		Lot #	

PLEASE RETURN ALL COOLERS FOR RQ-2021-06-07-06