

RQ-2020-10-05-44

Login Checklist

Login Station ID: #4

Shipping Method: FedEx UPS | HD | Greyhound

Date/Time of Receipt: 10/07/2020 @ 10:20

*Cooler Temperature	Samples Frozen?	* All Samples in Cooler Preserved with		Number of Sample Containers in Cooler	Evidence Tape				Waybill Tracking #
					Present?		*Intact?		
	YES	HNO ₃	Formalin		Yes	No	Yes	No	
1.3				7		x			911763820536

COOLER CHECK

*All samples received on ice unless otherwise noted. HNO3 and Formalin preserved samples do NOT have a temperature requirement.

- If the temperature of a cooler exceeds 6.0 oC (above 10.0 oC for W-1-4-DIOX and microbiology) or received without ice, identify affected samples in an NCR. NCR# _____
- DOH coolers can exceed 2.0 °C above the standard temperature (6.0 or 10.0 °C for W-1-4-DIOX) without login confirmation from customer for samples requiring ice preservation; identify affected samples in an NCR. NCR# _____
- If cooler or samples are received with a damaged Evidence Seal; identify the affected samples in an NCR. NCR# _____
- If coolers or samples are received late; identify the affected samples in an NCR. NCR# _____

Chain of Custody/ Field Sheet(s) Included?

Yes ☒ No ☐

Micro-Biology Overflow Chain of Custody/ Field Sheet(s) Included?

Yes ☐ No ☒

CONTAINER CHECK

Evidence Tape on Bottles?

Yes ☐ No ☐ NA ☒Evidence Tape intact? Yes ☐ No ☐

If Criminal, photographs taken?

Yes ☐ No ☐Containers intact? Yes ☒ No ☐

Caps on tight?

Yes ☒ No ☐

Sufficient Sample Volume:

Yes ☒ No ☐If **NO** is checked above, generate an NCR listing affected sample IDs in its appropriate category. NCR# _____

CHLORINE CHECK REQUIRED? (Blue dot on container)

Yes ☐ No ☒ Init: Tulane

Chlorine detected? (One container checked per Field ID)

Yes ☐ No ☐ Init: _____

If chlorine is detected, generate an NCR listing affected sample IDs . NCR# _____

PRESERVATION CHECK (EXCLUDING SAMPLES SENT TO OVERFLOW LABS, "OV-")

**Acid Preserved Samples: pH < 2.0?

Yes ☒ No ☐ NA ☐ Init: Tulane**W-1-4-DIOX (Green dot on container) preserved to pH < 4.0? Yes ☐ No ☐ NA ☒ Init: Tulane

If samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

Coolers Unpacked/Checked by: Tyler Reynolds

Date: 10/07/2020

Event contains NCRs (Y/N)? NoneEvent ID: Nassau West 2 wbid 2288
NE-DIST-2020-10-07-02 (SMP)

Page 1 of 2, 06 Date Received: 07-OCT-2020 10:40

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Infrared Thermometer ID:	#4 Temp Gun EXP:11/05/2020
pH Test Strips 0 – 6	
pH Paper 0 – 3	
pH Paper 0 – 13	231019 EXP:11/01/2022
Chlorine Test Strips	8261 EXP:07/2021

Additional Comments:

ENCORE SAMPLES

S-VOC-MS samples in Encores must be frozen within 48 hours of collection.

Were Encore samples received? Yes _____ Init: _____

Date and time placed in freezer _____

Were all samples placed in freezer within 48 hours of collection? Yes _____ No _____

If no, were samples shipped on dry ice? Yes _____ No _____

If S-VOC-MS samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

FOR CLEAN LAB USE ONLY – Total Mercury Preservation Check (W-HG-AF;W-HG-AF-F):

Samples preserved within 48 hours? Yes _____ No _____

Date and time samples preserved: _____

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 10/6/2020
Customer: NE-DIST
RQ: RQ-2020-10-05-44
Collected By: Kelly McDonald, Brian Davis
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: 1

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

Site Location	Field ID/WIN ID
Unnamed Branch @ Cr125	 19010123
FB	 FB100620

RELINQUISHED BY(SIGNATURE): *Brian Davis*

DATE/TIME: 10/06/20 1600

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: *Tyler Reynolds*

Rec'd/Inspected Date: *10/06/2020*

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:

Pesi

RQ:

2020-10-05-44

Project:

Nassau West 2

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

6/18/20

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.	Brian Davis	10/6/20	835	23.1	761.4	8.6	✓	100.2	✓	1.07	P/F	L/F
ICV			837	23.2	761.5	8.6	8.57	100.2	✓	1.07	P/F	L/F
CCV	K. McDonald		1435	23.4	760.0	8.5	8.55	100.4	✓	1.07	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Brian Davis	10/6/20	841	200407C	4/21	1000	1000	P/F	L/F
ICV			843	200407D	4/21	100	102.6	P/F	L/F
CCV	K. McDonald		1436	200407C	04/21	1000	1001	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.	Brian Davis	10/6/20	848	2001C31	1/22	7.0	23.6	7.01	-20.5	P/F	L/F
Calibr.			851	2910G29	10/21	4.0	23.7	4.00	157.3	P/F	L/F
Calibr.			854	2002911	8/21	10.02	23.6	10.02	-19.9	P/F	L/F
ICV			858	2001C31	1/22	7.0	23.6	7.05	-20.7	P/F	L/F
CCV	K. McDonald		1438	2910G29	10/21	4.0	24.2	4.05	154.2	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)

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: 6/18/20

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	Brian Davis	10/6/20	900	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:



RQ-2020-10-05-44

Customer: WQAP

Project ID: SMP

Collected By: Kelly McDonald, Brian Davis

Field Report Prepared By: Kelly McDonald

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



19010123

Location: Unnamed Branch @ Cr125

Comments: Microbiology sample(s) submitted to contract laboratory

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 _h)
10/6/2020	11:00 EST	4.83	54	20.9	5.96	0.13	0.25 ☒ VOB (S)	0.25	61.8	0.03

Central Lab please use top row for login purposes

	EST									

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 Lot # Sa9354050 Exp: 12/20/2020	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3* ☐ <2			
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # R0cb48647 Syringe Lot #	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	A
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			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci ☒ Contract Lab	☒ Ice		1	A
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 ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			
		☐ Ice			

Name: Brian Davis, Kelly McDonald

Signature:

Brian Davis

Date:

10/06/20

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Unnamed Branch @ Cr125

Date: 10/6/2020

WIN/Field ID: 19010123

WBID: 2288

ENR:

Latitude: 30.2959

County: BAKER

Org ID: 21FLA

Longitude: -82.1623

Receiving Body of Water: Nassau - St. Marys

RQ- 2020-10-05-44

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Kelly McDonald			☒	☒	☒
☒	Brian Davis	☒	☒			
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Meter	
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# DESI

Photos: No

Flow: FLOW

Tide:

Tide Times:

High:

Low:

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

SBIO ID Numbers:

Notes:

Duplicate Sample

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

WIN DMT Activity ID:

Blank

Time Zone: EST Time: 11:10 1105 Field ID: FB100620 (Blank Type_DDMYYYY)

DI Source: Ne roc

Location: Unnamed branch at cr125

DI Type: FB

Equipment ID:

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: (Initials/Date) QC Station ID, Field Parameters In LIMS DMT: (Initials/Date)

Scan/Save Field Sheets BD 10/06/20 Migrate Data to WIN: (Initials/Date) Verify Data In WIN: (Initials/Date)



RQ- 2020-10-05-44

Customer: WQAP

Project ID: SMP

Collected By: Kelly McDonald, Brian Davis

Field Report Prepared By: Kelly McDonald, Brian Davis

Sampling Agency: FDEP

BLANK



Field ID: FB100620

Comments:

Matrix: FB

(Check one) ☐ COMPOSITE ☒ GRAB

Date

Time

DI Source: Ne roc

10/6/2020

11:05

EST / CST

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	B
	Lot # _____ Exp: 12/20/2020				
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ H2SO4	☐ <2		
	Lot # _____ Exp: _____				
Filtered Nutrients (P125ML)	☒ W-PO4-F Filter ☒ Field Filtered 0.45 µm	☒ Ice		1	B
	Filter Lot # R0cb48647				
	Syringe Lot # _____				
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-IC / TDS	☒ Ice		1	B
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ 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			
	☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)				
Name: Kelly McDonald Brian Davis		Signature: <i>Brian Davis</i>		Date: 10/6/20	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

SR #
ALS C

9143 Philips Highway, Suite 200, Jacksonville, FL 32256
Phone (904) 739-2277 / 800-695-7222 x06 / FAX (904) 739-2011
www.alsglobal.com

Project Name Nassau West 2		Project Number RQ-2020-10-5-44		ANALYSIS REQUESTED (Include Method Number and Cont)												
Report To Dep-overflowmicro@dep.state.fl.us		Report CC		Preservative												
Company/Address FDEP				NUMBER OF CONTAINERS ECOL												
Phone #		FAX #														
Sampler's Signature Kelly McDonald		Sampler's Printed Name Kelly McDonald														
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE TIME		Matrix												
19010123		10/10	1100	SW	1	X										
Special Instructions/Comments:					TURNAROUND REQUIREMENTS				REPORT REQUIREMENTS							
S.8					RUSH (SURCHARGES APPLY)				I. Results Only							
					STANDARD				II. Results + QC Summaries							
					REQUESTED FAX DATE				III. Results + QC and Calibration Sur							
SAMPLE RECEIPT: CONDITION/COOLER TEMP:					CUSTODY SEALS: Y N				REQUESTED REPORT DATE				Edata Yes No			
Relinquished By		Received By		Relinquished By		Received By		Relinquished By		Received By		Relinquished By		Received By		
Signature Kelly McDonald		Signature Valerie Spears		Signature		Signature		Signature		Signature		Signature		Signature		
Printed Name Kelly A McDonald		Printed Name Valerie Spears		Printed Name		Printed Name		Printed Name		Printed Name		Printed Name		Printed Name		
Firm FDEP NEROC		Firm ALS		Firm		Firm		Firm		Firm		Firm		Firm		
Date/Time 10/10/20 1403		Date/Time 10/10/20 1403		Date/Time		Date/Time		Date/Time		Date/Time		Date/Time		Date/Time		

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

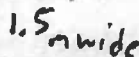
SAMPLING AGENCY: <u>FDEP DEAR NERO</u>		STORET STATION NUMBER: <u>19010123</u>	DATE (MM/DD/YY): <u>10/6/20</u>	RECEIVING BODY OF WATER: <u>Little St Mary's</u>
REMARKS:	COUNTY: <u>Baker</u>	LOCATION: <u>Unagued Branch @ CR125</u>	FIELD ID/NAME:	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>8</u>	20 19 18 17 16	15 14 13 12 11	10 9 <u>8</u> 7 6	5 4 3 2 1
Substrate Availability <u>6</u>	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 <u>6</u>	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>1.2</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥ 0.33 0.31 0.29 0.27 > 0.25 20 19 18 17 16	Max. observed at typical transect: > 0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 > 0.1 15 14 13 <u>12</u> 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: < 0.05 m/sec; or spate occurring: > 1 m/sec < 0.05 0.04 0.03 0.01 < 0.01 5 4 3 2 1
Habitat Smothering <u>9</u> Primary Score <u>35</u>	Adequate number of stable pools (1-2 per 12 times width) and < 25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and > 25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (< 2 x prevailing depth). 10 <u>9</u> 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging or straightening in the past (> 25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <u>11</u>	20 19 18 17 16	15 14 13 12 <u>11</u>	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas.
Right Bank <u>5</u> Left Bank <u>5</u>	10 9	8 7 6	<u>5</u> 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation > 12 to 18 m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>10</u> Left Bank <u>10</u>	<u>10</u> 9	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance.	> 50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>4</u> Left Bank <u>4</u> Secondary Score <u>49</u>	10 9	8 7 6	5 <u>4</u>	3 2 1

84 TOTAL SCORE

Date: <u>10/6/20</u>	Analyst: <u>Bruce Davis</u>	Signature: <u>B-D</u>
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1.5.1



$S = 0.45$ $S = 4.9$
 $L = 0.1$ $L = \sim 0.1$
 $R = 2.2$

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 21 FLA LATITUDE 30.29589
 COUNTY Baker STORET # 19010122 LONGITUDE -82.162258
 DATE 10/6/20 TIME 1100 SAMPLING AGENCY PEAK NEROC
 SITE NAME Unghed Branch @ CR125
 FIELD ID/NAME _____ RECEIVING BODY OF WATER Little St Mary's

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☐								Landscape Development Intensity Index (LDI) ☐
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy						Typical Width (m) Depth (m)/Velocity (m/sec) Transect ☐ m/s <u>0.13</u> m/s ☐ m/s ☐ m deep <u>0.4</u> m deep ☐ m deep		
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18m</u> Right Bank: <u>>18m</u>				Hydrologic Modification Score (per FT 3101) ☐				
High Water Mark: <u>1.0</u> + <u>0.4</u> = <u>1.4</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				
Artificially ☐ No ☒ Mostly recovered, more sinuous Channelized: ☒ Some recovery ☐ Recent, severe				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)				

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse			Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify): _____			Smothering of Substrates Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Silt Smothering: None ☒ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐																																						
SUBSTRATE TYPE Assessment Tool: ☐ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon			WATER QUALITY <table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.13</u></td> <td><u>20.9</u></td> <td><u>5.96</u></td> <td><u>4.83</u></td> <td><u>54</u></td> <td><u>61.8</u></td> <td><u>0.00</u></td> <td>☐</td> </tr> <tr> <td>Mid:</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table> Meter ID: _____ TOTAL DEPTH <u>0.25</u>							Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.13</u>	<u>20.9</u>	<u>5.96</u>	<u>4.83</u>	<u>54</u>	<u>61.8</u>	<u>0.00</u>	☐	Mid:	☐	☐	☐	☐	☐	☐	☐	☒ VOB	Bottom:	☐	☐	☐	☐	☐	☐	☐	☐
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Bottom:	☐	☐	☐	☐	☐	☐	☐	☐																																				
Woody Debris (Snags) <u>4</u> Undercut Banks / Roots <u>2</u> Leaf Packs or Mat <u>1</u> Aquatic Vegetation _____ Rock or Shell Rubble _____ Sand _____ Mud / Muck / Silt _____ Other _____ Other _____			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globes ☐ Slick ☐ Other ☐																																						
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐																																						
			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: _____ Exp: _____			Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																						
ABUNDANCE <table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>				Not Obs.	Rare	Common	Abundant	Periphyton:	☒	☐	☐	☐	Fish:	☐	☒	☐	☐	Aquatic Plants:	☒	☐	☐	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐																
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AMBIENT FIELD CONDITIONS / NOTES: ☐ The antecedent hydrologic conditions have been met to my best knowledge.																																												

SAMPLING TEAM B. Davis, K McDonald SIGNATURE: B. Davis DATE: 10/6/20

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Unghed Bay 4 @ C12 125

County: Baker

Date: 10/6/20

Investigators: B D, KM

STORET Station Number:
19010123

Transect t (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect t (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		92	60	1	N		83
	2	N							
	3		X						
	4								
	5								
	6								
	7		↓						
	8	N							
	9	N							
10	1	N		93	70	1	N		90
	2		X						
	3								
	4								
	5								
	6								
	7		↓						
	8	N							
	9	N							
20	1	N		95	80	1	N		92
	2	N							
	3		X						
	4								
	5								
	6								
	7		↓						
	8	N							
	9	N							
30	1	N		92	90	1	N		92
	2	N							
	3		X						
	4								
	5								
	6								
	7		↓						
	8	N							
	9	N							
40	1	N		74	100	1	N		95
	2	N							
	3		X						
	4								
	5								
	6								
	7		↓						
	8	N							
	9	N							
50	1	N		79	Record "N" and check "Estimated" for points deeper than Secchi depth presumed absent. Check "Estimated" if thickness of algal mat can be seen but not reached.				
	2	N			Record "X" for points shallower than Secchi depth if algal mat reached with the hand. No estimated rank.				
	3		X		Record canopy cover as the number of small dense patches per square meter. HAVE canopy cover. Measure facing upstream at 1 m.				
	4				Collect algal mat sample following DEP SOP FS 72 for points with a thickness rank of 4, 5, or 6 is >20%.				
	5								
	6								
	7		↓						
	8	N							
	9	N							

Secchi depth	10.8
Estimated?	

# points ranked 4-6	0
total points assessed	99
% points ranked 4-6	0

Check accompanying data collected at same site/date.	
Algal mat sample	✓
Linear Veg Survey	✓
Habitat Assessment	✓
SCI/Biorecon	✓
Water sample	✓
RQ- 2020-10-05-44	

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

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%.

62-160.800, F.A.C.

Revision Date: ~~January 2017~~

Revision Date: January 2017

Date of Request: 15-SEP-2020
 Created By: PARRISH_J On: 15-SEP-2020
 Modified By: WATTS_J On: 02-OCT-2020
 Customer: NE-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Northeast District
 Event Description: Nassau West 2 wbid 2288

Send Coolers To:

Phone: 904-256-1700
 8800 Baymeadows Way West
 Suite 100
 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Cooler Ship EMail: Jeremy.M.Parrish@dep.state.fl.us

Priority: 3
 Event Status: R
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 02-OCT-2020
 Biology Request Reviewed By: WATTS_J On: 02-OCT-2020
 Sampling Kit Required: NO Ship on:
 Sampling Kit Shipped: YES On: 21-SEP-2020
 Sampling Kit Packed By: REYNOLDS_T
 Preservatives Needed: NO
 Date to Receive Samples: 05-OCT-2020
 Logged In By: REYNOLDS_T On: 07-OCT-2020

Send Final Report To:

8800 Baymeadows Way West
 Suite 100
 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Report Notification EMail: Jeremy.M.Parrish@dep.state.fl.us

Comments: Group A: (Surf.Fresh)Nutrients, Bacteria
 Group B:(blank)Nutrients

Packing Notes:
 None

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-2011) Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
W-CL-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Chloride in aqueous matrices
W-COLOR	Template: DEFAULT	(SM 2120 B-2011) True Color measured at 450 nm (not valid for NPDES monitoring)
Color (true)		
W-F	Template: DEFAULT	(SM 4500 F-C-2011) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO4-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS	Template: DEFAULT	(SM 2540 C-2011) Total Dissolved Solids in aqueous matrices
W-TSS	Template: DEFAULT	(SM 2540 D-2011) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Bottle Type: P-250ML-WI-THI	Number of Bottles: 1	Preserved With: ICE
NE-ALS-ECQ	Template: DEFAULT	(SM 9223 B Quanti-Tray) E. coli by Colilert/QT by ALS in Jacksonville
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H2SO4
W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Template: DEFAULT	(EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Template: DEFAULT	(SM 5310 B-2011) Nonpurgeable Organic Carbon in aqueous matrices

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-125ML	Number of Bottles: 1	Preserved With: FILTER-ICE
W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group B (Water) With 1 Samples:

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-2011) Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
W-CL-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Chloride in aqueous matrices
W-COLOR	Template: DEFAULT	(SM 2120 B-2011) True Color measured at 450 nm (not valid for NPDES monitoring)
Color (true)		
W-F	Template: DEFAULT	(SM 4500 F-C-2011) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO4-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS	Template: DEFAULT	(SM 2540 C-2011) Total Dissolved Solids in aqueous matrices
W-TSS	Template: DEFAULT	(SM 2540 D-2011) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H2SO4
W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Template: DEFAULT	(EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Template: DEFAULT	(SM 5310 B-2011) Nonpurgeable Organic Carbon in aqueous matrices
Bottle Type: P-125ML	Number of Bottles: 1	Preserved With: FILTER-ICE
W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L