Roberts, Zachary

From: Parrish, Jeremy M.
Sent: Wednesday, December 29, 2021 12:28 PM
To: Roberts, Zachary
Cc: Klug, Kyle
Subject: RE: RQ-2021-09-20-18, empty container

Hi Zachary,
I remember that. We did not collect any algae ID to sample, I inadvertently put the empty vial in the cooler.

Jeremy

From: Roberts, Zachary <Zachary.Roberts@FloridaDEP.gov>
Sent: Wednesday, December 29, 2021 12:24 PM
To: Parrish, Jeremy M. <Jeremy.M.Parrish@FloridaDEP.gov>
Cc: Klug, Kyle <Kyle.Klug@FloridaDEP.gov>
Subject: RQ-2021-09-20-18, empty container

Good afternoon,

The ALGAL_ID sample in RQ-2021-09-20-18 arrived open in the cooler, it will have to be cancelled.

Zachary Roberts
Engineering Technician III
850-245-8060
Florida Department of Enviornmental Protection

Login Checklist

RQ- 2021-09-20-18 Login Station ID: #4

Shipping Method: FedEx | UPS | HD | Greyhound Date/Time of Receipt: 12/ 29 /21 @ 9:55

*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	
4.1				3		X			5225 5541 6031
1.2				10		X			5225 5541 6020

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 X

CONTAINER CHECK

Evidence Tape on Bottles? Yes ____ No ____ NA X Evidence Tape intact? Yes _____ No _____

If Criminal, photographs taken? Yes ____ No ____ Containers intact? Yes √ No _____

Caps on tight? Yes √ No X

Sufficient Sample Volume: Yes ✓ No X

If NO is checked above, generate an NCR listing affected sample IDs in its appropriate category. NCR# 9191

CHLORINE CHECK REQUIRED? *(Blue dot on container)* Yes √ No _____ Init: ZR

Chlorine detected? *(One container checked per Field ID)* Yes_____ No X Init: ZR

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: ZR

**W-1-4-DIOX *(Green dot on container)* preserved to pH<4.0? Yes_____ No_____ NA X Init: ZR

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

Coolers Unpacked/Checked by: ZR **Date:** 12/ 29 /21 **Event contains NCRs (Y/N)?** Yes

Event ID: Moccassin / Swimming Pen 001
NE-DIST-2021-12-29-01 (SMP)
Date Received: 29-DEC-2021 09:55

Login Checklist

Login Preservation Equipment	Lot # & Exp: Date
Infrared Thermometer ID:	#4 Temp Gun EXP:10/19/2022
pH Test Strips 0 – 6	N/A
pH Paper 0 – 3	N/A
pH Paper 0 – 13	210620 EXP:04/15/2023
Chlorine Test Strips	0261 EXP:05/2023

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:	12/28/2021	**Collected By:**	Kimberly Appleby, Brian Davis
Customer:	NE-DIST	**Sampling Agency:**	FDEP
RQ:	RQ-2021-09-20-18	**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:** FedEx

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

Site Location	Field ID/WIN ID
MOCCASSIN BRANCH AT WINFORD MASTERS RD	20030557

RELINQUISHED BY(SIGNATURE):

DATE/TIME: 12/28/2021 1600EST

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: YR **Rec'd/Inspected Date:** 12-29-2021

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

2021-09-20-184

Meter ID: Dosi | RQ-2021-10-11-60 | Project: Algae Bloom Response Molasses SCE+

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

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 11/10/21

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.	Kim Appleby	12/28/21	804	17.5	762.1	9.6	—	100.3	—	1.062	(P) F	(L) F
ICV	↓	↓	806	17.5	762.2	9.6	9.60	100.4	—	1.062	(P) F	(L) F
CCV	↓	↓	1619	21.8	760.1	8.8	8.74	99.5	—	1.062	(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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Kim Appleby	12/27/21	808	2109178	9/2022	1000	1000	(P) F	(L) F
ICV	↓	↓	810	2104264	5/2022	100	103.0	(P) F	(L) F
CCV	↓	↓	1621	2111228	12/2022	1413	1417	(P) F	(L) F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 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.	Kim Appleby	12/28/21	813	2109M25	9/2023	7.03	18.0	7.03	-28.7	(P) F	(L) F
Calibr.	↓	↓	815	2108F51	8/2023	4.00	18.0	4.00	152.2	(P) F	(L) F
Calibr.	↓	↓	816	2108H37	2/2023	10.07	18.1	10.07	-195.6	(P) F	(L) F
ICV	↓	↓	819	2109M25	9/2023	7.03	18.0	7.06	-24.7	(P) F	(L) F
CCV	↓	↓	1622	2108F51	8/2023	4.00	19.1	4.03	150.0	(P) F	(L) F
CCV	↓	↓	1623	2108H37	2/2023	10.06	18.9	10.03	-195.8	(P) F	(L) F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50; mV pH 4 Range +180 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 166.9, slope from 4 to 7 180.9 (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: 11/10/21
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	Kim Appleby	12/28/21	820	0.00	0.00	(P) F	(L) F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

Form effective August 1, 2018

RQ-2021-09-20-18
Customer: WQAP
Project ID: SMP

Collected By: Kimberly Appleby, Brian Davis
Field Report Prepared By: Kimberly Appleby
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: 20030557

Location: MOCCASSIN BRANCH AT WINFORD MASTERS RD

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 (PPTh)
12/28/2021	1215 EST	7.15	74.9	17.5	6.79	0.3	0.587 ☒ VOB (S)	0.587	421.1	0.2
	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	☒ Ice ☒ H_2SO_4*	☒ <2	1	A
	Lot # SA1105060 **Exp:** 4/30/22				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO_3*	☐ <2	1	A
	Lot # NA1105100 **Exp:** 6/7/22				
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # R1EB01329				
	Syringe Lot #				
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 Lot #** N/A	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
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)	X W-E8321-DI X WE8321-MS X W-PSNP-TQ W-CT-CL-R W-PCL-TQ-R W-CARB-AA (5 ml of MCAA** Buffer Solution)	☒ Ice		4	A
Phytoplankton/Periphyton	DTY-QN-C PKD-QN-BV	☐ Ice			

Name: Kimberly Appleby, Brian Davis

Signature: B. D.

Date: 12/28/2021

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End of Day CCV
Yes / No

WIN Station Name: MOCCASSIN BRANCH AT WINFORD MASTERS RD **Date:** 12/28/2021

WIN/Field ID: 20030557 **WBID:** 2540 **ENR:** _____ **Latitude:** 29.7714722

County: ST. JOHNS **Org ID:** 21FLA **Longitude:** -81.475305

Receiving Body of Water: - **RQ-** 2021-09-20-18

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Kimberly Appleby	x		x		
[x] Brian Davis		x			
[x] Jeremy Parrish				x	x
[ ]					

Sampling Equipment

- [x] Sample Container
- [ ] Dipper
- [ ] Syringe
- [ ] Carboy
- [ ] Van Dorn
- [ ] Pole

Depth measured with: Meter

Secchi Equipment ID:

Collection Method

- [x] **Wading**
- [ ] **From Shore**
- [ ] **Other** _____
- [ ] **Canoe/Kayak**
- [ ] **Electric Motor**
- [ ] **Gasoline Motor**

Water Level: [X] Normal [ ] Low [ ] High [ ] Dry [ ] Pooled [ ] Flooded

Meter ID# DESI

Photos: NO **Flow:** FLOW **Tide:**

Tide Times: High: Low:

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

SBIO ID Numbers:

Notes:

WEATHER: SUNNY

Duplicate Sample

Time Zone: EST **Time:** _____ **Field ID:** _____ (WIN ID_DUP)

WIN DMT Activity ID: _____

Blank

Time Zone: _____ **Time:** _____ **Field ID:** _____ (Blank Type_DDMMYYYY)

DI Source: _____ **Location:** _____

DI Type: _____ **Equipment ID:** _____

DI Container (Name/ID): **DI Container Type:**

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 12/28/2021 (Initials/Date) **Migrate Data to WIN:** _____ (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

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

SAMPLING AGENCY:		STORET STATION NUMBER: 20030SJ-7	DATE (MM/DD/YY): 12/28/21	RECEIVING BODY OF WATER: LSJR
REMARKS:	COUNTY: St Johns Putnam	LOCATION: Moccasin Marsh		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 10	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 11	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 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 20	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 12 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 16 Primary Score 57	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 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components **Artificial Channelization** 20	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging or straightening in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank 9 Left Bank 9	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the woody root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank 10 Left Bank 10	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 6 Left Bank 6 Secondary Score 70	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. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

127 **TOTAL SCORE**

Date: 12/28/21	Analyst: Jerry Pennington / Tim Bovis	Signature: Jerry Pennington

62-160.800, F.A.C.

Revision Date: January 2017

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Moccasin Branch at winter Masters Pk | Date: 12/23/2 | County: St. Johns | Storet Number: 20030552

Analyst: Brian Davis + Kim Appleby | Signature: B— D—

Comments: >2m of vegetation within 100m stretch

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m^2 of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta			✓		✓		✓	✓	✓	✓	
Commelina diffusa	✓					✓	✓	✓	✓	✓	
Commelina virginica											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle			✓		✓		✓	✓	✓		
Hygrophila polysperma											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum						✓	✓	✓			
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica											
Sambucus sp.							✓			✓	

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

SAMPLE ID _____ ORG ID 21FLA LATITUDE 29.771472
COUNTY St. Johns STORET # 21FLA 2003057 LONGITUDE -81.475305
DATE 12/28/21 TIME 1215 SAMPLING AGENCY FDEP NE RBC
SITE NAME Moultrie Branch at Winfield Masters Rd
FIELD ID/NAME _____ RECEIVING BODY OF WATER _____

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)
10			85	5			

Landscape Development Intensity Index (LDI): _____

Local Watershed Erosion (select one): ☐ None ☑ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution: ☑ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side — Left Bank: >18 Right Bank: >18

Hydrologic Modification Score (per FT 3101): 5

High Water Mark: 0.5 (m) + 0.6 (above present water level) = 1.1 (present depth) (above bed)

Artificially Impounded: ☐ Yes ☒ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect: 3.25 m wide

_____ m/s	0.33 m/s	_____ m/s
_____ m deep	0.6 m deep	_____ m deep

Artificially Channelized: ☑ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ 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

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☒	☐	☐
Silt Smothering:	☐	☒	☐	☐
Algae Smothering:	☒	☐	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☑ SCI ☑ RPS ☑ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	5		
Undercut Banks / Roots	10.5		
Leaf Packs or Mat	>1		
Aquatic Vegetation	>1		
Rock or Shell Rubble..			
Sand,,,.....	42		
Mud / Muck / Silt	40		
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.3	17.5	6.79	7.15	74.9	421.1	0.2
Mid:							
Bottom							

Secchi (M): 0.587 ☒ VOB

Total Depth: 0.587

Meter ID: Desi

Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ 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

	Not Obs.	Rare	Common	Abundant
Periphyton:	☐	☒	☐	☐
Fish:	☒	☐	☐	☐
Aquatic Plants:	☐	☒	☐	☐
Iron/Sulfur Bacteria:	☐	☒	☐	☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ _____

AMBIENT FIELD CONDITIONS / NOTES:

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM
Kim Appleby, Jeremy Parrish, Brian Davis

SIGNATURE: _____ DATE: 12-28-21

62-160.800, F.A.C.

Revision Date: January 2017

RQ-2021-09-20-18

Date of Request: 16-AUG-2021
Created By: PARRISH_J On: 16-AUG-2021
Modified By: JASROTIA_P On: 18-AUG-2021
Customer: NE-DIST
Project: SMP
Division: Division of Environmental Assessment and Restoration
District: Northeast District
Event Description: Moccassin / Swimming pen SCI

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: S
Criminal Investigation: NO
Chemistry Request Reviewed By: WATTS_J On: 18-AUG-2021
Biology Request Reviewed By: JASROTIA_P On: 18-AUG-2021
Sampling Kit Required: YES Ship on: 10-SEP-2021
Sampling Kit Shipped: YES On: 09-SEP-2021
Sampling Kit Packed By: REYNOLDS_T
Preservatives Needed: NO
Date to Receive Samples: 20-SEP-2021
Logged In By:

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: Nutrients, Metals, Tracers, Q-PSNP-TQ, Bacteria
Group B: SCI, Algae_ID

NE-ALS-ECQ

Packing Notes:
none

Bottle Group A (Water) With 2 Samples:

Bottle Type: P-1L Number of Bottles: 2 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 Color (true)	Template: DEFAULT	(SM 2120 B-2011) True Color measured at 450 nm (not valid for NPDES monitoring)
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: 2 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: 2 Preserved With: ICE

NE-ALS-ECQ	Template: DEFAULT	(SM 9223 B Quanti-Tray) E. coli by Colilert/QT by ALS in Jacksonville

Bottle Type: BG-500ML Number of Bottles: 2 Preserved With: ICE

W-E8321-DI	Template: DEFAULT	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
W-E8321-MS	Template: SMP/96%	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Bottle Type: P-500ML Number of Bottles: 2 Preserved With: HNO3

W-HARD Hardness	Template: DEFAULT	(SM 2340B) Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
W-ICP	Template:	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Bottle Group A (Water) With 2 Samples:

Bottle Type: P-500ML Number of Bottles: 2 Preserved With: HNO3

W-ICP	Template:	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Barium
Calcium
Iron
Magnesium
Manganese
Potassium
Sodium
Zinc

W-ICPMS	Template:	(EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

*Boron
Aluminum
Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Nickel
Selenium
Silver
Thallium

Bottle Type: P-500ML Number of Bottles: 2 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: 2 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 Type: BG-1L Number of Bottles: 6 Preserved With: ICE

W-PSNP-TQ	Template:	(EPA 8270E) Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Bottle Group B (Biological) With 2 Samples:

Bottle Type: PJ-2L Number of Bottles: 4 Preserved With: Formalin

MI-FW-QLDC	Template: DEFAULT	(SOP-IZ06) No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Bottle Type: PT-50ML Number of Bottles: 2 Preserved With: ICE

ALGAL_ID	Template: DEFAULT	(SOP-AB05) Qualitative assessment of algal taxa present without counts

* - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.