



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Yes / No

Date: 10/2/19
(mm/dd/yyyy)

WIN Station Name: Stone Mill Creek Upstream of Dianna St.

WIN/ Field ID: G2WA0012

WBID: 1075

Latitude: 30.1577919
(Decimal Degrees)

County: Gulf

ORG ID: 21FLWQA

Longitude: -85.2302
(Decimal Degrees)

Receiving Body of Water: Chipola River

RQ: 2019-09-16-20

Sampling Team Members

Curtis Musson
Hrivi Wood-McGrath

WQ Measurements
Sample Collection
Documentation
Preservation
Check

Sampling Equipment
☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☒ Syringe
☐ Dipper ☐ Other
Depth Measured with Secchi
Equipment ID

Collection Method
☒ Wading ☐ Canoe/Kayak
☐ From Shore ☐ Electric Motor
☐ Other ☐ Gasoline Motor

Matrix: Fresh / Marine / DI

Water Level: Dry / Pooled / Low / Normal / High / Flooded

Meter ID# 19J104543

Tide Times: High NA Low NA

Photos: Yes / No Flow: No Flow / Intertidal / Flowing NA

Tide: Rising / Falling / Slack NA

Salinity (PPT) Sp COND (µmhos/cm) Temp. (C°)

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	9:41	0.8	0.4	VOB	6.03	70.6	6.75	0.04	82.4	23.2
CEN										

Biological Samples Collected: None (HA) (SCI) (RPS) (Algae ID) (LVS) LVI Other: Macrophyte-ID: 11510 LIMS#: 2124459

SBIO ID Numbers: SBIO-ID: 80337 HA-ID: 16332 RPS-ID: 9462

Parameter Suite	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients ☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP	☒ Ice ☒ H2SO4	SA9129100	5/9/20	<2
Metals ☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	NA9189080	7/1/20	<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-CL-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine) ☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☒ Formalin			
Macroinvertebrates ☒ MI-FW-QLDC	☒ Ice			
Periphyton ☒ ALGAE-ID	☒ Ice			
Microbiology ☒ E Coli ☐ F Coli ☐ Enterococci ☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Molecular	☐ Ice			
Tracers ☒ W-E8321-DI ☒ W-E8321-MS ☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides ☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-CARB-AA ☐ W-PCL-SQ-R ☒ WE8321-MS	☐ Ice			
Phytoplankton ☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes:
SCI, RPS, LVS, HA
SCI Kit

WIN ID / FILED ID
G2WA0012

Location
Stone Mill Creek
Upstream of Dianna St.

Date: 10/7/19

Signature:

WIN Import ID:

QC Station ID, Field Parameters in LIMS DMT: 10/22/19

Parameters, Verify Station ID in LIMS DMT: 10/9/19

Verify Data in WIN:

Field Sheets

Migrate Data to WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

Contains: 1.1 H2SO4
Lot No. SA9129100
Expires: 05/09/20
See Safety Data Sheet (SDS)

Contains: 1.1 HNO3
Lot No. NA9189080
Expires: 07/08/20
See Safety Data Sheet (SDS)

Contains: 1.1 H2SO4
Lot No. SA9129100
Expires: 05/09/20
See Safety Data Sheet (SDS)

Contains: 1.1 HNO3
Lot No. NA9189080
Expires: 07/08/20
See Safety Data Sheet (SDS)

Entered by: AM 10/14/19

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

SAMPLE ID 80337 ORG ID 2i FLWQA LATITUDE 30.1577919
 COUNTY OWF STORET # B2WA0012 LONGITUDE -85.2302
 DATE 10/21/19 TIME 9:41 SAMPLING AGENCY FDEP
 SITE NAME B2WA0012; Stone Mill Creek
 FIELD ID/NAME G2WA0012 RECEIVING BODY OF WATER Chipola River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>34</u> Silviculture <u>62</u> Field/Pasture <u>2</u> Agricultural <u><1</u> Residential <u>1</u> Commercial <u><1</u> Industry <u>1</u> Other (Specify) <u>—</u>							Landscape Development Intensity Index (LDI) <u>1.55</u>
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 <u>2</u> m wide <u>0.27</u> m/s <u>0.8</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>10m</u> Right Bank: <u>18m</u>				Hydrologic Modification Score (per FT 3101) <u>3-4</u>			
High Water Mark: <u>1.1</u> + <u>0.8</u> = <u>1.9</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>0.8</u></td> <td><u>23.2</u></td> <td><u>6.75</u></td> <td><u>6.03</u></td> <td><u>70.6</u></td> <td><u>82.4</u></td> <td><u>0.04</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>							Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.8</u>	<u>23.2</u>	<u>6.75</u>	<u>6.03</u>	<u>70.6</u>	<u>82.4</u>	<u>0.04</u>		Mid:								☒ VOB	Bottom:								
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Mid:								☒ VOB																																				
Bottom:																																												
Woody Debris (Snags) <u>3</u> <u>5</u> Undercut Banks / Roots <u>2</u> <u>5</u> Leaf Packs or Mat <u>1</u> <u>1</u> Aquatic Vegetation <u>1</u> <u>5</u> Rock or Shell Rubble.. <u>—</u> <u>—</u> Sand..... <u>—</u> <u>4</u> Mud / Muck / Silt <u>—</u> <u>—</u> Other <u>—</u> <u>—</u> Other <u>—</u> <u>—</u>			Meter ID: <u>185104543</u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐																																						
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐																																						
			Algae Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>ICE</u> Exp: _____			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐																																						
			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐			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:	☒	☐	☐	☐	AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my be.																
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SAMPLING TEAM <u>Ami Wood McGath Curtis Musson</u>			SIGNATURE 			DATE: <u>10/22/19</u>																																						

WIN ID / FILED ID → 
 G2WA0012

Stone Mill Creek
 Upstream of Dianna St.

Entered by: ~~AKB~~ 10/14/19
QC'd by: ANMM 10/22/19

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

SBI0: 80337

SAMPLING AGENCY: FDEP		STORET STATION NUMBER: G2WA0012 ✓	DATE (MM/DD/YY): 10/2/19 ✓	RECEIVING BODY OF WATER: Chipola River
REMARKS: HA: 16332	COUNTY: Gulf	LOCATION: Stone Mill Creek	FIELD ID/NAME: G2WA0012	

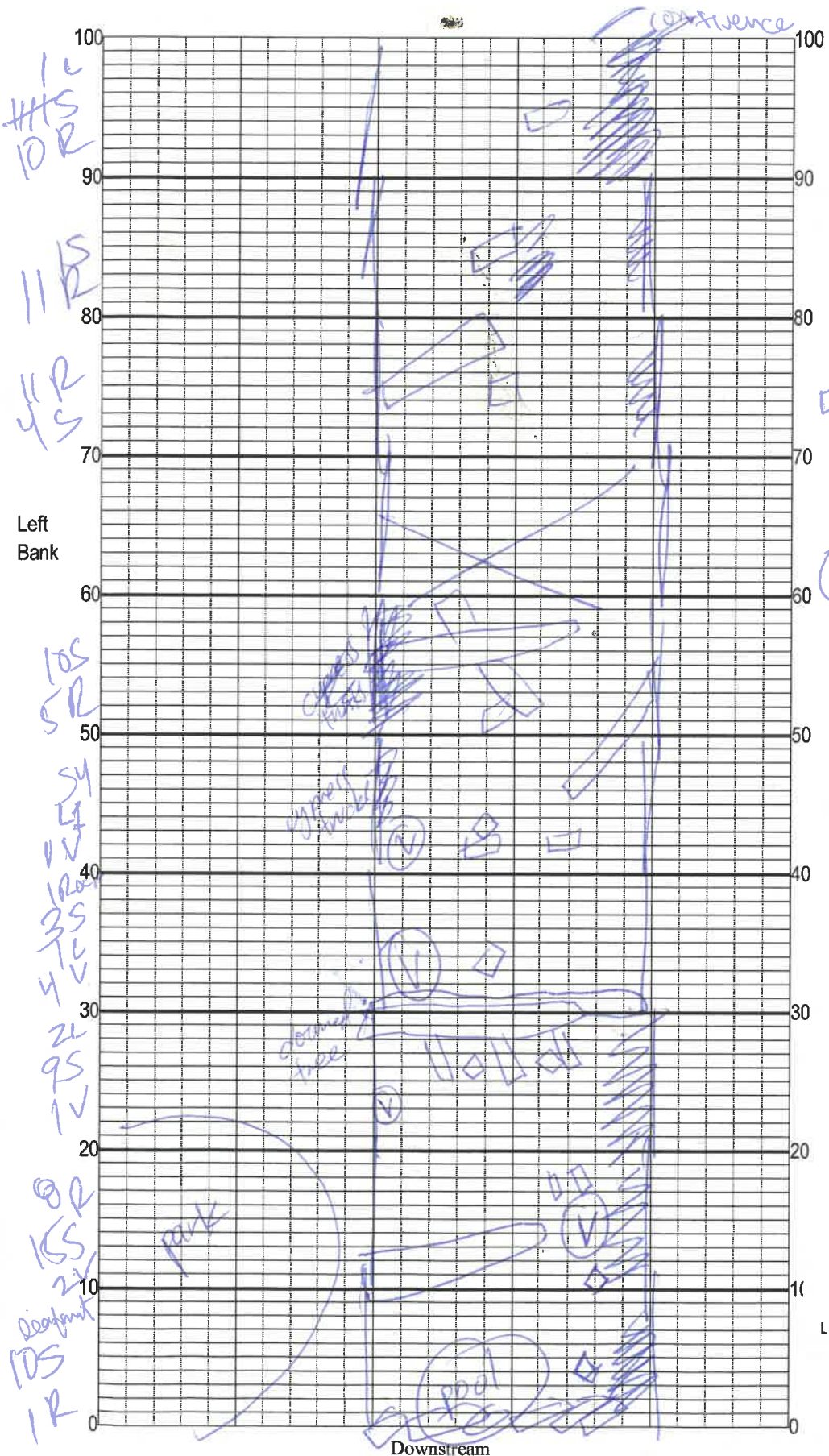
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>12</u> ✓	20 19 18 17 16	15 14 13 <u>12</u> 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>9</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 <u>8.5</u> 10 9 <u>8</u> 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>17</u> ✓ <u>0.27</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 <u>17</u> 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 <u>13</u> ✓ ----- Primary Score <u>50</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 <u>13</u> 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 <u>16</u> ✓	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 <u>16</u>	Good sinuosity within old channelized area. Evidence of dredging 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 <u>8</u> ✓ Left Bank <u>6</u> ✓	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. <u>8</u> 7 <u>6</u>	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 root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>10</u> ✓ Left Bank <u>5</u> ✓	Width of vegetation greater than 18 m <u>10</u> 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system <u>5</u> 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank <u>9</u> ✓ Left Bank <u>6</u> ✓ ----- Secondary Score <u>60</u>	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. <u>10</u> 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 <u>6</u>	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

110 ✓ TOTAL SCORE

Date: <u>10/7/19</u>	Analyst: <u>Ann Wood-McGraw</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: 62WA0012
 Date: 10/2/19
 Sampler: Curtis Musson, Ann Wood - Musson

100 m: Latitude _____
 Longitude _____
 0 m: Latitude _____
 Longitude _____

Substrates: Code key, draw proportionate habitat abundance.		%
☒ 61	Snags	4.5
☒ 28	Roots/undercut banks	2
☒ 10	Leaf Packs (or mats)	1
☒ 12	Aquatic Macrophytes	1
☒ 2	rock	
☐		
☐	Pools	total # observed = _____ # range expected = _____

Average width 2.5 m
 Average depth 0.8 m

Velocity measured at 0 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:
 Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:
 Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
 Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

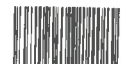
WIN ID / FILED ID → G2WA0012

Location Stone Mill Creek
Upstream of Dianna St.

25sqm = major
 6 = 1sqm

225 total area
 Revision Date: March 1, 2014

Length of grid represents 100 m of stream (not linear meters).
 (Horizontal scale is double vertical scale, draw proportionately).

WIN ID /
FILED ID →

G2WA0012 ✓

SRIO: 80337 RPS: 9462

-25 Rapid Periphyton Survey Field SheetLocation Stone Mill Creek
Upstream of Dianna St.

County:

Date:

Investigators:

10/2/19 ✓

Curtis Musson, April Wood-McBrath

STORET Station Number:

G2WA0012 ✓

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	3	2		60 ✓	1	4	2	
	2	3				2	4		
	3	4				3	4		
	4	3		0		4	4		
	5	X	X			5	4		94
	6	X	2			6	4		
	7	4	2			7	4		
	8	4				8	4		
	9	4	2			9	X	X	
10 ✓	1	3	2		70 ✓	1	4	2	
	2	3				2	4		
	3	3				3	4		
	4	3		16		4	4		
	5	3				5	N		96
	6	N				6	4		
	7	5				7	4		
	8	5				8	4		
	9	5	2			9	N	2	
20 ✓	1	4	2		80 ✓	1	4	2	
	2	4				2	4		
	3	4				3	4		
	4	X	2			4	4		
	5	X	2	84		5	4		96
	6	X	2			6	4		
	7	4	2			7	4		
	8	4				8	4		
	9	4	2			9	N	2	
30 ✓	1	4	2		90 ✓	1	4	2	
	2	4				2	4		
	3	4				3	4		
	4	X	2			4	4		
	5	X	2			5	4		95
	6	X	2			6	4		
	7	4	2			7	4		
	8	4				8	4		
	9	4	2			9	N	2	
40 ✓	1	4	2		100 ✓	1	4	2	
	2	4				2	4		
	3	4				3	4		
	4	X	2			4	X	2	
	5	X	2	96		5	X	2	89
	6	X	2			6	X	2	
	7	4	2			7	4		
	8	4				8	4		
	9	4	2			9	4		
50 ✓	1	4	2						
	2	4							
	3	4							
	4	X	2						
	5	X	2	91					
	6	X	2						
	7	X	2						
	8	X	2						
	9	X	2						

Secchi depth	108
Estimated?	N

# points ranked 4-6	34
total points assessed	76
% points ranked 4-6	45

Check accompanying data
collected at same site/date.

Algal mat sample	✓
Linear Veg Survey	✓
Habitat Assessment	✓
SCI/Biorecon	✓
Water sample	✓

RQ- 2019-09-16-20

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%.

SRIC: 20337 Macrophyte: 11510

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

Waterbody: Stone Mill Creek

Date: 11/2/19

County: Gulf

Storet Number: 62WA0012

Analyst: Curtis Maxwell / April Wood-Johnson

Signature: 

Comments: SMP Sampling

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² 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										Specime n collected (check)	HERBACEOUS SPECIES	Meter Mark										Specime n collected (check)		
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			
Alternanthera philoxeroides												Myriophyllum heterophyllum													
Bacopa caroliniana												Najas guadelupensis													
Bacopa monnieri												Nuphar luteum													
Bidens mitis												Orontium aquaticum ✓	X	X	X										
Boehmeria cylindrica												Panicum hemitomon													
Centella asiatica												Panicum repens													
Ceratophyllum demersum												Panicum rigidulum													
Chara												Peltandra virginica													
Cicuta maculata												Pistia stratioides													
Cladium jamaicense												Polygonum glabra													
Colocasia esculenta												Polygonum hydropiperoides													
Commelina diffusa												Polygonum punctatum													
Commelina virginica												Pontederia cordata ✓		X											
Crinum americanum												Potamogeton illinoensis													
Diodia virginiana												Rhynchospora inundata													
Eichhornia crassipes												Rosa palustris													
Eleocharis (wispy viviparous)												Ruellia simplex													
Hydrilla verticillata												Rumex verticillatus													
Hydrocotyle												Sacciolepis striata													
Hygrophila polysperma												Sagittaria kurziana													
Hymenocallis												Sagittaria lancifolia													
Lachnanthes caroliniana												Sagittaria latifolia													
Landoltia punctata												Salvinia minima													
Lemna												Samolus parviflora													
Limnophila sessiflora												Saururus cernuus													
Ludwigia leptocarpa												Scirpus (schenoplectus) californicus													
Ludwigia palustris												Sparganium americanum													
Ludwigia peruviana												Typha													
Ludwigia repens												Vallisneria americana													
Luziola fluitans												Zizania aquatica													
Micranthemum glomeratum												Juncus Repens ✓													
Micranthemum umbrosum																									
Mikania scandens																									
Myriophyllum aquaticum																									
If no Dominant or Co-Dominant were selected, indicate with "X"																									
Indicate % cover macrophytes per section																									
0-5% Macrophyte Coverage													X X X X X X X X X X												
>5 and ≤10% Macrophyte Coverage																									
>10 and ≤25% Macrophyte Coverage																									
>25 and ≤50% Macrophyte Coverage																									
> 50% Macrophyte Coverage																									

Notes:

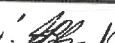
WIN ID /
FILED ID →

G2WA0012

☐ < 2m²

Location

Stone Mill Creek
Upstream of Dianna St.

Entered by:  10/14/19
QC'd by: Ann 10/22/19

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: 185104543

RQ: 2019-09-16-20
2019-09-16-21

Project: SMP

- 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.	Ami wood-MC	10/2	6:38	21.2	757.3	8.880	8.88	99.7	—	—	P/F	L/F
ICV	↓	↓	6:58	22.3	757.3	8.883	8.67	99.7	—	—	P/F	L/F
CCV	↓	↓	17:32	30.0	755.0	7.559	1.61	100.6	—	—	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.	Ami wood-MC	10/2	6:48	190618F	8/20	1000	1000	P/F	L/F
ICV	↓	↓		2908C81	8/21	100	100.5	P/F	L/F
CCV	↓	↓	17:36	2908C81	8/21	100	101.7	P/F	L/F
CCV			17:37	190618F	8/20	1000	1001	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.	Ami wood-MC	10/2	6:52	190618B	12/20	7.02	21.7	7.02	-46.7	P/F	L/F
Calibr.	↓	↓	6:53	190618A	12/20	4.00	21.3	4.00	127.5	P/F	L/F
Calibr.	↓	↓	6:54	190618C	12/20	10.05	21.2	10.02	-213.3	P/F	L/F
ICV	↓	↓	6:56	190618C	12/20	6.05	21.0	10.02	-213.6	P/F	L/F
CCV	↓	↓	17:47	190618A	12/20	4.00	23.0	4.20	114.3	P/F	L/F
CCV										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						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:

Costs Answer

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Location	WIN ID / FILED ID	Collection (comp begin or grab)	Eastern Composite end	Bottle Group(s)
Field ID	G2W/A0012	Matrix (type, e.g., Salt, Fresh, etc)	mg/L Total Res. Chlorine	(See pg 2)
WIN/STORE	Stone Mill Creek Upstream of Dianna St.	Temp (C) 23.02	Diss. Oxygen 76.6	A4
Latitude	☐ dd ☐ dms	Salinity (ppt) 0.04	Sample Depth 0.3	
Location		Comments		
Field ID	Same	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	B
WIN/STORE #	Same	Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	
Latitude	☐ dd ☐ dms	Salinity (ppt)	Sample Depth	
Location		Comments		
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	
WIN/STORE #		Temp (C)	pH	

Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						

Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUTE-W						

Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ECOLL-18QT						

Group: A	Bottle Type:	BG-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	W-E8321-DI						
	W-E8321-MS						

Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP						
	W-ICPMS						

Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						

Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						

Group: A	Bottle Type:	BG-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
	W-PSNP-TQ						

Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALGAL_ID						

Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	2
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M1-FW-Q1DC

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ca

Group: B	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: ECOL-18QT	P-250ML-WO-THI	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1
Group: C	Bottle Type: ECOL-18QT	P-250ML-WO-THI	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1

Cooler Packing Worksheet for Request: RQ-2019-09-16-20

SCI 9

Ship Cooler On: 9/12/2019

Customer/Project: WAS-SECT/SMP

Assigned To: REYNOLDS_T

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, Tracers, Q-PSNP-TQ

Group B: SCI, Algae_ID

Packing Notes:

No FedEx Labels

No Trash Bag

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1

Preservation: ICE

Lot # 00674723

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: 1

Preservation: ICE

Lot # 1259820

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-250ML-WO-THI

Qty: 1 Preservation: ICE

Lot # 6M01-TN

Description: 250 ml Sterilized no tablet

Analysis

ECOLI-18QT

Description

Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

Container ID: BG-500ML

Qty: 1 Preservation: ICE

Lot # 00075274

Description: Brown Glass Bottle 500ML

Affix BLUE dot to container.

Analysis

W-E8321-DI

W-E8321-MS

Description

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 # 00075342

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: 1 Preservation: ICE And H2SO4

Lot # 00075342

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 # 00074800

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 # 00074098

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

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

Container ID: PJ-2L

Qty: 2 Preservation: Formalin

Lot # BIOWASH

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Cooler Packed By: Tyler R.

Number of Coolers: 1

Date: 09/11/19

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-2019-09-16-20