# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
# STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? Yes / (No)

**WIN Station Name:** Rock Creek Above the Apalachicola ✓ **Date:** 6/27/19 ✓✓ (mm/dd/yyyy)

**WIN/ Field ID:** G2WA0019 ✓✓ **WBID:** 613 ✓ **Latitude:** 30.5822 (Decimal Degrees)

**County:** Liberty **ORG ID:** 21FLWQA **Longitude:** -84.9403 (Decimal Degrees)

**Receiving Body of Water:** Apalachicola **RQ-** 2019-06-24-58

| Sampling Team Members | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|---|---|---|---|---|---|
| Curtis Musson | | ✓ | | | |
| Blake Spencer | | ✓ | | | |
| Avril Wood-McGrath | ✓ | | ✓ | ✓ | ✓ |

**Sampling Equipment**
- [x] Sample Container [ ] Van Dorn [ ] Pole
- [ ] Carboy [x] Syringe
- [ ] Dipper [ ] Other
- Depth Measured with Meter stick
- Equipment ID

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

**Water Level:** Dry/ Pooled/ Low / (Normal) / High / Flooded **Meter ID#** ProDSS 18J104543 **Matrix:** (Fresh) / Marine / DI

**Photos:** (Yes) / No **Flow:** No Flow / Intestital / (Flowing) / NA **Tide:** Rising/ Falling/ Slack/ NA **Tide Times:** High NA Low NA

| Time Zone | Time | Total Depth (m) | Sample Depth (m) | Secchi Disk (m) | DO (mg/L) | DO (%SAT) | pH | Salinity (PPTh) | Sp COND (µmhos/cm) | Temp. (C°) |
|---|---|---|---|---|---|---|---|---|---|---|
| (EST) | 10:36 ✓ | 0.2 ✓ | 0.1 ✓ | VOB | 8.30 ✓ | 99.9 ✓ | 7.31 ✓ | 0.03 ✓ | 60.1 ✓ | 24.7 ✓ |
| CEN | | | | | | | | | | |

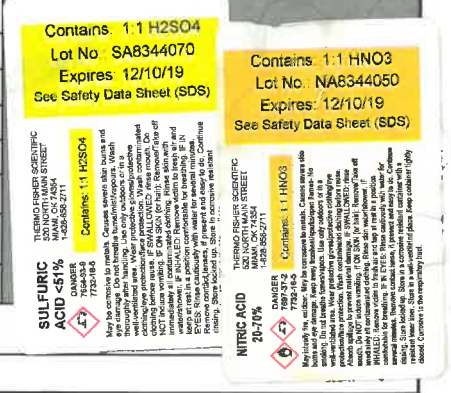
**Biological Samples Collected:** None (HA) (SCI) (RPS) Algae ID (LVS) LVI Other:

**SBIO ID Numbers:** SBIO-ID: 79969 HA-ID: 16144 RPS-ID: 9399 Macrophyte-ID: 2m² LIMS#:

| Parameter Suite | Parameter Methods | Preservation | Lot# | Expiration | pH Check |
|---|---|---|---|---|---|
| Preserved Nutrients | [x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP | [x] Ice [x] $H_2SO_4$ | SA8344070 | 12/10/19 | [x] <2 |
| Metals | [x] W-ICPMS [ ] W-ICP | [x] Ice [x] $HNO_3$ | NA8344050 | 12/10/19 | [ ] <2 |
| Filtered Nutrients | [x] W-PO4-F [x] Field Filtered 0.45 µm Filter | [x] Ice | | | |
| Chlorophyll | [x] CHLSUITE-W | [ ] Ice | | | |
| Physical/Aggregate (Fresh) | [x] 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 | [ ] Ice | | | |
| Macroinvertebrates | [x] MI-FW-QLDC | [x] Formalin | | | |
| Periphyton | [ ] ALGAE-ID | [ ] Ice | | | |
| Microbiology | [x] E Coli [ ] F Coli [ ] Enterococci | [x] Ice | | | |
| Molecular | [ ] PCR-FILTER [ ] PCR-BacR [ ] PCR-GULL2 [ ] PCR-HF183 [ ] PCR-DG3 [ ] PCR-GFD | [ ] Ice | | | |
| Tracers | [x] W-E8321-DI [x] W-E8321-MS | [ ] Ice | | | |
| Pesticides | [x] W-PSNP-TQ [ ] W-CT-CL-R [x] W-E8321-DI [ ] W-PCL-SQ-R [x] WE8321-MS [ ] W-CARB-AA | [ ] Ice | | | |
| Phytoplankton | [ ] DTY-QN-C [ ] PKD-QN-C | [ ] Ice | | | |

Contains: 1:1 H2SO4 Lot No.: SA8344070 Expires: 12/10/19 See Safety Data Sheet (SDS)

Contains: 1:1 HNO3 Lot No.: NA8344050 Expires: 12/10/19 See Safety Data Sheet (SDS)




**Notes:** SCI

WIN ID / FILED ID → G2WA0019

Location Rock Creek Above The Apalachicola

**Signature:** [signature] **Date:** 6/27/19

**LIMS EVENT ID:** WAS-SECT-2019-06-28-01 ✓ **WIN Import ID:**

**Enter Field Parameters, Verify Station ID In LIMS DMT:** [illegible] 7/23/19 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** [illegible] 8/15/19

**Scan/Save Field Sheets** CM 12-30-2019 (Initials/Date) **Migrate Data to WIN:** DT/9-12-19 (Initials/Date) **Verify Data In WIN:** CM 12-30-2019 (Initials/Date)

Entered by: [illegible] 7/23/19
Ocd by [illegible] 8/15/19
INSBIO 8-15-19 CS

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

SBIO: 79969

| SAMPLING AGENCY: | STORET STATION NUMBER: | DATE (MM/DD/YY): | RECEIVING BODY OF WATER: |
|---|---|---|---|
| Florida Department of Environmental Protection | G2WA0019 | 6/27/19 ✓ | Apalachicola |

| REMARKS: | COUNTY: | LOCATION: | FIELD ID/NAME: |
|---|---|---|---|
| HA: 16144 ✓ | Liberty | Rock Creek Above the Apalachicola | G2WA0019 |

| Habitat Parameter | Optimal | Suboptimal | Marginal | Poor |
|---|---|---|---|---|
| Primary Habitat Components (Snag, Leaf, Roots, Rock, Aquatic Vegtation)<br>**Substrate Diversity** 19 ✓ | Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]<br>20 (19) 18 17 16 | Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)<br>15 14 13 12 11 | Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed<br>10 9 8 7 6 | One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered<br>5 4 3 2 1 |
| **Substrate Availability** 20 ✓ %<br>(-30% 27.2% 25.8% 24.4% 26.6%) | Major productive habitat present at site<br>(20) 19 18 17 16 | Major productive habitat, by aerial extent<br>(21.6% 20.2% 18.8% 17.4% 16%)<br>15 14 13 12 11 | 6% to 15% major productive habitat<br>(15% 13% 11% 9% 6%)<br>10 9 8 7 6 | Less than 5% major productive habitat<br>5 4 3 2 1 |
| **Water Velocity** 20 ✓<br>0.33 m/s | Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec<br>≥0.33 0.31 0.29 0.27 >0.25<br>(20) 19 18 17 16 | Max. observed at typical transect: >0.1 to 0.25 m/sec<br>0.25 0.21 0.17 0.13 >0.1<br>15 14 13 12 11 | Max. observed at typical transect: 0.05 to 0.1 m/sec<br>0.1 0.09 0.07 0.06 0.05<br>10 9 8 7 6 | Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec<br><0.05 0.04 0.03 0.01 <0.01<br>5 4 3 2 1 |
| **Habitat Smothering** 5 ✓<br>Primary Score 64 ✓ | Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae.<br>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.<br>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).<br>10 9 8 7 6 | Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation.<br>(5) 4 3 2 1 |
| Secondary Habitat Components<br>**Artificial Channelization** 20 ✓ | Expected sinuosity given the stream width. No evidence of dredging or artificial straight-ening. No spoil banks.<br>(20) 19 18 17 16 | Good sinuosity within old chan-nelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. May have spoil banks.<br>15 14 13 12 11 | Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. May have spoil banks.<br>10 9 8 7 6 | Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.<br>5 4 3 2 1 |
| **Bank Stability**<br>Right Bank 5 ✓ WW<br>Left Bank 5 ✓<br>If Banks are PipeClay, BedRock or Concrete at Bank full: Optimal | Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. (+,+,+)<br>10 9 | Only meets 2 of the 3 requirements for optimal bank stability. (+,+,-)<br>8 7 6 | Only meets 1 of the 3 requirements for optimal bank stability. (+,-,-)<br>(5) 4 | Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. (-,-,-)<br>3 2 1 |
| **Riparian Buffer Zone Width**<br>Right Bank 10 ✓<br>Left Bank 10 ✓ | Width of vegetation greater than 18 m<br>(10) 9 | Width of vegetation >12 to 18m<br>8 7 6<br>(18m 15m 12m) | Width of vegetation 6 to 12 m. human activities close to system<br>5 4<br>(9m) | Less than 6 m of buffer zone due to intensive human activities<br>3 2 1<br>(6-5m) (4-3m) (<2m) |
| **Riparian Zone Vegetation Quality**<br>Right Bank 10 ✓<br>Left Bank 10 ✓<br>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.<br>(10) 9 | >50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.<br>8 7 6 | 25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.<br>5 4 | Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).<br>3 2 1 |

134 ✓ **TOTAL SCORE**

| Date: | Analyst: | Signature: |
|---|---|---|
| 6/27/19 | Blake Spencer | |

WIN ID / FILED ID → G2WA0019

Location: Rock Creek Above The Apalachicola

62-160.800, F.A.C.

Revision Date: March 1, 2[illegible]

**DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sh**

WIN ID / FILED ID → G2WA0019

Location: Rock Creek Above The Apalachicola

6/27/19

Sampler:

| | |
|---|---|
| 100 m: Latitude | |
| Longitude | |
| 0 m: Latitude | 30.58227 |
| Longitude | -84.94034 |

Substrates: Code key, draw proportionate habitat abundance. %

| | | |
|---|---|---|
| Snags | | 8 |
| Roots/undercut banks | | 7 |
| Leaf Packs (or mats) | | 7 |
| Aquatic Macrophytes | | |
| R | rock | 8 |
| | | |
| Pools | total # observed = 1 | |
| | # range expected = 3 | |

Average width 3 m

Average depth 0.2 m

Velocity measured at ____ meter mark.

WQ & chemistry taken at X 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:

Left Bank

Downstream

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

62-160.800, F.A.C

Revision Date: March 1, 2014

Entered by: [illegible] 7/23/19
QC'd by: [illegible] 8/15/19
Authorized: Cm 8-15-19

SBIO: 29969 RPS: 9399

# DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

| Site: | County: | Date: | Investigators: |
|---|---|---|---|
| G2WA0019 | Liberty | 6/27/19 | A. Wood - McGrath |

STORET Station Number: G2WA0019

| Transect (m) | Point 1=right 9=left | Algal Thickness Rank (N-6, X) | Estimated | Canopy Cover |
|---|---|---|---|---|
| 0 | 1 | N | N | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | 4% |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 10 | 1 | N | N | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | 4% |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 20 | 1 | N | N | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | 5% |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 30 | 1 | X | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | X |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 40 | 1 | N X | N X | [illegible] |
| | 2 | N | N | |
| | 3 | N | N | |
| | 4 | N | N | |
| | 5 | N | N | X |
| | 6 | N | N | |
| | 7 | N | N | |
| | 8 | N X | N X | |
| | 9 | N | N | |
| 50 | 1 | X | N | |
| | 2 | N | N | |
| | 3 | N | N | |
| | 4 | N | N | |
| | 5 | N | N | 36% |
| | 6 | N | N | |
| | 7 | N | N | |
| | 8 | N | N | |
| | 9 | N | N | |

| Transect (m) | Point 1=right 9=left | Algal Thickness Rank (N-6, X) | Estimated | Canopy Cover |
|---|---|---|---|---|
| 60 | 1 | X | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | X |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 70 | 1 | X | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | X |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 80 | 1 | N | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | 2% | |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 90 | 1 | N | N | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | 17% |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |
| 100 | 1 | X | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | X |
| | 5 | | | |
| | 6 | | | |
| | 7 | | | |
| | 8 | | | |
| | 9 | | | |

| | |
|---|---|
| Secchi depth | |
| Estimated? | No |
| # points ranked 4-6 | 0 |
| total points assessed | |
| % 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- | |

| 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%.

WIN ID / FILED ID → G2WA0019



Location: Rock Creek Above The Apalachicola

SBO ID: 79969

Rec'd by AWM 8/15/19

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

IW SBO Cy 8-15-19

| | | | |
|---|---|---|---|
| Waterbody: Rock Creek above the Apalachicola | Date: 6/27/19 | County: Liberty | Storet Number: G2WA0019 |
| Analyst: Blake Spencer | | Signature: | |
| Comments: SMP Sampling ~2m² ✓ | | | |

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 | | | | | | | | | | | |
| Micranthemum glomeratum | | | | | | | | | | | |
| Micranthemum umbrosum | | | | | | | | | | | |
| Mikania scandens | | | | | | | | | | | |
| Myriophyllum aquaticum | | | | | | | | | | | |
| | | | | | | | | | | | |
| **If no Dominant or Co-Dominant were selected, indicate with "X"** | | | | | | | | | | | |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Myriophyllum heterophyllum | | | | | | | | | | | |
| Najas guadelupensis | | | | | | | | | | | |
| Nuphar luteum | | | | | | | | | | | |
| Orontium aquaticum | | | | | | | | | | | |
| Panicum hemitomon | | | | | | | | | | | |
| Panicum repens | | | | | | | | | | | |
| Panicum rigidulum | | | | | | | | | | | |
| Peltandra virginica | | | | | | | | | | | |
| Pistia stratioides | | | | | | | | | | | |
| Polygonum glabra | | | | | | | | | | | |
| Polygonum hydropiperoides | | | | | | | | | | | |
| Polygonum punctatum | | | | | | | | | | | |
| Pontedaria cordata | | | | | | | | | | | |
| Potamogeton illinoensis | | | | | | | | | | | |
| Rhynchospora inundata | | | | | | | | | | | |
| Rosa palustris | | | | | | | | | | | |
| Ruellia simplex | | | | | | | | | | | |
| Rumex verticillatus | | | | | | | | | | | |
| Sacciolepis striata | | | | | | | | | | | |
| Sagittaria kurziana | | | | | | | | | | | |
| Sagittaria lancifolia | | | | | | | | | | | |
| Sagittaria latifolia | | | | | | | | | | | |
| Salvinia minima | | | | | | | | | | | |
| Samolus parviflora | | | | | | | | | | | |
| Saururus cernuus | | | | | | | | | | | |
| Scirpus (schenoplectus) californicus | | | | | | | | | | | |
| Sparganium americanum | | | | | | | | | | | |
| Typha | | | | | | | | | | | |
| Vallisneria americana | | | | | | | | | | | |
| Zizania aquatica | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| 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 | | | | | | | | | | | |

Notes:

WIN ID / FILED ID → G2WA0019

Location: Rock Creek Above The Apalachicola

< 2m2 ✓

Entered by: [illegible] 7/23/19
In SBIOCN 8/15/19

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

SAMPLE ID ~~G2WA0019~~ 79969 ORG ID 21FLWQA LATITUDE 30.58227
COUNTY Liberty STORET # G2WA0019 LONGITUDE -84.94034
DATE 6/27/19 TIME 10:36 AM SAMPLING AGENCY FEP
SITE NAME Rock Creek Above the Apalachicola
FIELD ID/NAME G2WA0019 RECEIVING BODY OF WATER Apalachicola River

## 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) |
|---|---|---|---|---|---|---|---|
| 83% | 13% | 3% | < | < | < | < | < |

**Landscape Development Intensity Index (LDI)**: 1.19

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 : 718 Right Bank : 718

**Hydrologic Modification Score** (per FT 3101) : 1-2

**High Water Mark:** 2.5 (m) + 0.2 (above present water level) = 2.7 (present depth) (above bed)

**Artificially Impounded** ☐ Yes ☒ No

**Typical Width (m) Depth (m)/Velocity (m/sec) Transect**
3 m wide

| | | |
|---|---|---|
| m/s | 0.33 m/s | m/s |
| m deep | 0.2 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) | 8 | IIII | |
| Undercut Banks / Roots | 7 | IIII | |
| Leaf Packs or Mat ..... | 7 | IIII | |
| Aquatic Vegetation ..... | | | |
| Rock or Shell Rubble.. | 8 | IIII | |
| Sand..... | | IIII | |
| Mud / Muck / Silt ..... | | | |
| Other ..... | | | |
| Other ..... | | | |

**WATER QUALITY**

| | Depth (M) | Temp. (°C) | pH (SU) | D.O. (MG/L) | D.O. Sat (%) | Cond. (UMHO/CM) | Salinity (PPT) |
|---|---|---|---|---|---|---|---|
| Top : | 0.1 | 24.7 | 7.31 | 8.30 | 99.9 | 60.1 | 0.03 |
| Mid: | | | | | | | |
| Bottom | | | | | | | |

SECCHI (M) : ☒ VOB
TOTAL DEPTH : 0.2
Meter ID: ProSS 18J104543

**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: SA9344070 Exp: 12/10/19

**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 CONDITIO**

WIN ID / FILED ID → G2WA0019

☒ The antecedent hydrologi

Location: Rock Creek Above The Apalachicola

**SAMPLING TEAM** Blake Spencer, Curtis Musson, Avril Woodington

SIGNATURE :

DATE : 6/27/19

## 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: 19J104543 RQ- 2019-06-24-58 2019-06-03-27 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. | Blake Spencer | 6/27/19 | 0706 | 20.3 | 760 | 9.0 | 9.02 | 100 | — | — | P / F | L / F |
| ICV | " | 6/27/19 | 0709 | 20.5 | 760.0 | 9.0 | 9.02 | 100 | — | — | P / F | L / F |
| CCV | Blake Spencer | 6/27/19 | 1705 | 23.5 | 759.1 | 8.50 | 8.59 | 101.1 | — | — | 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. | Blake Spencer | 6/27/19 | 0711 | 190619F | 06/2020 | 1000 | 1001 | P / F | L F |
| ICV | " | 6/27/19 | 0712 | 190619F | 06/2020 | 1000 | 994 | P / F | L F |
| CCV | Blake Spencer | 6/27/19 | 1708 | 290 9984 | 07/2020 | 100 | 100.2 | 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. | Blake Spencer | 6/27/19 | 0716 | 190621E | 01/2020 | 7.01 | 22.2 | 7.01 | -28.0 | P F | L F |
| Calibr. | " | " | 0718 | 190405B | 10/2020 | 4.00 | 22.8 | 4.00 | 172.6 | P F | L F |
| Calibr. | " | " | 0720 | 190621F | 01/2020 | 10.03 | 22.5 | 10.03 | -169.2 | P F | L F |
| ICV | " | " | 0721 | 190621F | 01/2020 | 10.03 | 22.6 | 10.05 | -169.6 | P F | L F |
| CCV | Blake Spencer | 6/27/19 | 1711 | 190405B | 10/2020 | 4.00 | 22.8 | 4.07 | 139.9 | 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 ± 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: _____
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 | 6/27/19 | 0722 | 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:**

**Request Number: RQ-2019-06-24-58**

SCI 9

# Florida Department of Environmental Protection
## Central Laboratory Submittal Form



last revised Jan 25, 2018

**Customer: WAS-SECT**

**Project ID: SMP**

Requester: Curtis Musson

Collected By: Blake Spencer / Curtis Musson

Field Report Prepared By: Avril Wood-McGrath

Sampling Agency: FDEP

---

**Location:** WIN ID / FILED ID → G2WA0019 — Rock Creek Above The Apalachicola

Field ID:

WIN/STORET #:

Latitude: 30.58227 ☒dd ☐dms | Longitude: -84.94034 ☒dd ☐dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 6/27/19 Time 10:36 Eastern / Central | Composite end Date — Time — | Bottle Group(s) (See pg 2): A

Matrix (type, e.g., Salt, Fresh, etc): Fresh | Diss. Oxygen: 99.9 ☐ mg/L ☒ % sat | Total Res. Chlorine (mg/L): —

Temp (C): 24.7 | pH: 7.31 | Sample Depth: 0.1 ☐ ft ☒ m | Sp. Conductance (umho/cm): 60.1

Salinity (ppt): 0.03 | Comments:

---

**Location:** WIN ID / FILED ID → G2WA0019 — Rock Creek Above The Apalachicola

Field ID:

WIN/STORET #:

Latitude: 30.58227 ☒dd ☐dms | Longitude: -84.94034 ☒dd ☐dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 6/27/19 Time 1308 Eastern / Central | Composite end Date — Time — | Bottle Group(s): B

Matrix (type, e.g., Salt, Fresh, etc): biological | Diss. Oxygen: — ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L): —

Temp (C): — | pH: — | Sample Depth: 0.1 ☐ ft ☐ m | Sp. Conductance (umho/cm): —

Salinity (ppt): — | Comments: NO ALGAL ID; 3 JUGS RETURNED

---

**Location:**

Field ID:

WIN/STORET #:

Latitude: ☐dd ☐dms | Longitude: ☐dd ☐dms

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time Eastern / Central | Composite end Date Time | Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen: ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)

Temp (C) | pH | Sample Depth: ☐ ft ☐ m | Sp. Conductance (umho/cm)

Salinity (ppt) | Comments

---

**Location:**

Field ID:

WIN/STORET #:

Latitude: ☐dd ☐dms | Longitude: ☐dd ☐dms

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time Eastern / Central | Composite end Date Time | Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen: ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)

Temp (C) | pH | Sample Depth: ☐ ft ☐ m | Sp. Conductance (umho/cm)

Salinity (ppt) | Comments

---

| Relinquished By: | Date/Time | Shipping Method | Number of Coolers Shipped: | Received By: | Date/Time |
|---|---|---|---|---|---|
| | 6/28/19 0805 | Hand Delivered | 2 | | 6/28/19 0805 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group: A | Bottle Type: | P-1L | # of Bottles: 1 | Preservative: | ICE | Enter Number of Bottles Sent to Lab | 1 |
| | ALKALINITY<br>TURBIDITY<br>W-CL-IC<br>W-COLOR<br>W-F<br>W-SO4-IC<br>W-TDS<br>W-TSS | | | | | | |
| Group: A | Bottle Type: | BP-1L | # of Bottles: 1 | Preservative: | ICE | Enter Number of Bottles Sent to Lab | 1 |
| | CHLSUITE-W | | | | | | |
| Group: A | Bottle Type: | P-250ML-WO-THI | # of Bottles: 1 | Preservative: | ICE | Enter Number of Bottles Sent to Lab | 1 |
| | ECOLI-18QT | | | | | | |
| Group: A | Bottle Type: | BG-500ML | # of Bottles: 1 | Preservative: | ICE | Enter Number of Bottles Sent to Lab | 1 |
| | W-E8321-DI<br>W-E8321-MS | | | | | | |
| Group: A | Bottle Type: | P-500ML | # of Bottles: 1 | Preservative: | HNO3 | Enter Number of Bottles Sent to Lab | 1 |
| | W-ICP<br>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<br>W-NO2NO3<br>W-S-A-TP<br>W-TKN<br>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 | Ø |
| | ALGAL_ID | | | | | | |
| Group: B | Bottle Type: | PJ-2L | # of Bottles: 2 | Preservative: | Formalin | Enter Number of Bottles Sent to Lab | |

Group: B Bottle Type: PJ-2L # of Bottles: 2 Preservative: Formalin **Enter Number of Bottles Sent to Lab** 3

MI-FW-QLDC

# RQ-2019-06-24-58



Date of Request: 11-JUN-2019
Created By: MUSSON_C On: 11-JUN-2019
Modified By: MUSSON_C On: 11-JUN-2019
Customer: WAS-SECT
Project: SMP
Division: Division of Environmental Assessment and Restoration
District:
Sampling Event: SCI 9

**Send Coolers To:**

Phone: 850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399
Attn: Curtis Musson

**Send Final Report To:**

2600 Blair Stone Rd

Tallahassee, FL 32399
Attn: Curtis Musson

Program Module Number:
Priority: 3
Event Status: P
Criminal Investigation: NO
Chemistry Request Reviewed By:
Biology Request Reviewed By:
Sampling Kit Required: YES Ship on: 11-JUN-2019
Sampling Kit Shipped:
Sampling Kit Packed By:
Preservatives Needed: NO
Date to Receive Samples: 26-JUN-2019
Received By:

Report Type: Final Only
FTP Data: NO
QC Report: YES
Date Log: NO
Authorization Log: NO

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

Packing Notes:
No FedEX Labels
No Trash Bag

## Bottle Group A (Water) With 1 Samples:

| Bottle Type: | | Number of Bottles: | Preserved With: |
|---|---|---|---|
| ALKALINITY | Template: DEFAULT | | (SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L |
| Total Alkalinity | | | |
| CHLSUITE-W | Template: DEFAULT | | (SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry |
| Chlorophyll-a, Corrected | | | |
| Chlorophyll-a, Uncorrected | | | |
| Phaeophytin-a | | | |
| ECOLI-18QT | Template: DEFAULT | | (SM 9223 Quanti-Tray) Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems |
| Escherichia Coli-Quanti-Tray | | | |
| TURBIDITY | Template: DEFAULT | | (EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices |
| Turbidity | | | |
| W-CL-IC | Template: DEFAULT | | (EPA 300.0 Rev. 2.1) Chloride in aqueous matrices |
| Chloride | | | |
| W-COLOR | Template: DEFAULT | | (SM 2120 B) True Color measured at 450 nm |
| Color (true) | | | |
| W-E8321-DI | Template: DEFAULT | | (EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS |
| *Acesulfame K | | | |
| *AMPA | | | |
| *Endothall | | | |
| *Glufosinate | | | |
| *Glyphosate | | | |
| *Sucralose | | | |
| W-E8321-MS | Template: DEFAULT | | (EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS |

## Bottle Group A (Water) With 1 Samples:

| Bottle Type: | | Number of Bottles: | Preserved With: |
|---|---|---|---|
| W-E8321-MS | Template: DEFAULT | (EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS | |
| *Acetaminophen | | | |
| *Afidopyropen | | | |
| *Carbamazepine | | | |
| *Clothianidin | | | |
| *Dinotefuran | | | |
| *Fluridone | | | |
| *Hydrocodone | | | |
| *Ibuprofen | | | |
| *Imazapyr | | | |
| *Naproxen | | | |
| *Primidone | | | |
| *Pyraclostrobin | | | |
| *Thiamethoxam | | | |
| *Triclopyr | | | |
| 2,4-D | | | |
| Bentazon | | | |
| Diuron | | | |
| Fenuron | | | |
| Imidacloprid | | | |
| Linuron | | | |
| MCPP | | | |
| W-F | Template: DEFAULT | (SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring) | |
| Fluoride | | | |
| 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 | | | |
| 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 | | | |
| Cadmium | | | |
| Chromium | | | |
| Copper | | | |
| Lead | | | |
| Nickel | | | |
| Selenium | | | |
| Silver | | | |
| Thallium | | | |
| W-NH3 | Template: DEFAULT | (EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L | |
| Ammonia-N | | | |
| W-NO2NO3 | Template: DEFAULT | (EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L | |
| NO2NO3-N | | | |
| W-PO4-F | Template: DEFAULT | (EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L | |
| O-Phosphate-P | | | |
| W-PSNP-TQ | Template: DEFAULT | (EPA 8270E) Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS | |
| *Dimethenamid | | | |
| *Dithiopyr | | | |
| *Fipronil Desulfinyl | | | |
| *Oxadiazon | | | |
| *Prodiamine | | | |

## Bottle Group A (Water) With 1 Samples:

| Bottle Type: | | Number of Bottles: | Preserved With: |
|---|---|---|---|
| W-PSNP-TQ | Template: DEFAULT | (EPA 8270E) | Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS |

*Tebuconazole
Acetochlor
Alachlor
Ametryn
Atrazine
Atrazine Desethyl
Azinphos Methyl
Bromacil
Butylate
Chlorpyrifos Ethyl
Chlorpyrifos Methyl
Cyanazine
Demeton
Diazinon
Disulfoton
EPTC
Ethion
Ethoprop
Fenamiphos
Fipronil
Fipronil Sulfide
Fipronil Sulfone
Fonofos
Hexazinone
Malathion
Metalaxyl
Metolachlor
Metribuzin
Mevinphos
Molinate
Norflurazon
Parathion Ethyl
Parathion Methyl
Pendimethalin
Phorate
Prometon
Prometryn
Simazine
Terbufos
Terbuthylazine

| | | |
|---|---|---|
| W-S-A-TP | Template: DEFAULT | (EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L |

Total-P

| | | |
|---|---|---|
| W-SO4-IC | Template: DEFAULT | (EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices |

Sulfate

| | | |
|---|---|---|
| W-TDS | Template: DEFAULT | (SM 2540 C-97) Total Dissolved Solids in aqueous matrices |

TDS

| | | |
|---|---|---|
| W-TKN | Template: DEFAULT | (EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices |

Kjeldahl Nitrogen

| | | |
|---|---|---|
| W-TOC | Template: DEFAULT | (SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices |

Organic Carbon

| | | |
|---|---|---|
| W-TSS | Template: DEFAULT | (SM 2540 D-97) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample |

TSS

## Bottle Group B (Biological) With 1 Samples:

| Bottle Type: | | Number of Bottles: | Preserved With: |
|---|---|---|---|
| ALGAL_ID | Template: DEFAULT | (SOP-AB05) | Qualitative assessment of algal taxa present without counts |

*Dominant sample taxon

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

*Macroinvert-FW-Qual-DipnetX20-#Taxa-Rep2

**Bottle Group B (Biological) With 1 Samples:**

| Bottle Type: | | Number of Bottles: | Preserved With: |
|---|---|---|---|
| MI-FW-QLDC | Template: DEFAULT | (SOP-IZ06) | No. Taxa of FW macroinverts, qual samp, 20 dipnets. |
| *Stream Condition Index (SCI) | | | |

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

**Cooler Packing Worksheet for Request: RQ-2019-06-24-58**

**SCI 9**

**Ship Cooler On: 6/20/2019**

**Customer/Project: WAS-SECT/SMP**

Assigned To: REAVES_S
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-TO ↳ MPH pest
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 #** 00073854

**Description: Plastic Bottle 1L**

| Analysis | Description |
|---|---|
| ALKALINITY | Alkalinity in aqueous matrices as mg CaCO3/L |
| TURBIDITY | Turbidity in aqueous matrices |
| W-CL-IC | Chloride in aqueous matrices |
| W-COLOR | True Color measured at 450 nm |
| W-F | Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring) |
| W-SO4-IC | Sulfate in aqueous matrices |
| W-TDS | Total Dissolved Solids in aqueous matrices |
| W-TSS | Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample |

**Container ID: BP-1L** **Qty: 1** **Preservation: ICE** **Lot #** 1248230

**Description: Brown Plastic Bottle 1L**

| Analysis | Description |
|---|---|
| CHLSUITE-W | Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry |

**Container ID: P-250ML-WO-THI** **Qty: 1** **Preservation: ICE** **Lot #** 7502-TN

**Description: 250 ml Sterilized no tablet**

| Analysis | Description |
|---|---|
| ECOLI-18QT | Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems |

---

**Container ID: BG-500ML** **Qty: 1** **Preservation: ICE** **Lot #** 00073513

**Description: Brown Glass Bottle 500ML** Affix BLUE dot to container.

| Analysis | Description |
|---|---|
| W-E8321-DI | Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS |
| W-E8321-MS | Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS |

---

**Container ID: P-500ML** **Qty: 1** **Preservation: HNO3** **Lot #** 00073852

**Description: Plastic Bottle 500 mL** Affix RED nitric acid dot to container.

| Analysis | Description |
|---|---|
| W-ICP | Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects |
| W-ICPMS | 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 #** 00073852

**Description: Plastic Bottle 500 mL** Affix YELLOW sulfuric acid dot to container.

| Analysis | Description |
|---|---|
| W-NH3 | Ammonia in aqueous matrices as mg N/L |
| W-NO2NO3 | Nitrite/Nitrate in aqueous matrices as mg N/L |
| W-S-A-TP | Total Phosphorus in aqueous matrices as mg P/L |
| W-TKN | Total Kjeldahl Nitrogen in aqueous matrices |
| W-TOC | Nonpurgeable Organic Carbon in aqueous matrices |

---

**Container ID: P-125ML** **Qty: 1** **Preservation: FILTER-ICE** **Lot #** 00073850

**Description: Plastic Bottle 125 mL**

| Analysis | Description |
|---|---|
| W-PO4-F | Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L |

---

**Container ID: BG-1L** **Qty: 4** **Preservation: ICE** **Lot #** 00073598

**Description: Brown Glass Bottle 1L** Affix BLUE dot to container.

| Analysis | Description |
|---|---|
| W-PSNP-TQ | 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 #** 438 SR 430897

**Description: Plastic Tube 50 mL**

| Analysis | Description |
|---|---|
| ALGAL_ID | Qualitative assessment of algal taxa present without counts |

---

**Container ID: PJ-2L** **Qty: 2** **Preservation: Formalin** **Lot #** BIOWASH

**Description: Plastic Jar 2 L**

| Analysis | Description |
|---|---|
| MI-FW-QLDC | No. Taxa of FW macroinverts, qual samp, 20 dipnets. |

---

Cooler Packed By: SR Number of Coolers: 2 Date: 6-18-19

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-2019-06-24-58**