



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE 1 OF 22

Data Qualified?
Yes No

STORET Station Name: Lake Lafayette Drain 250 meters downstream of Weems Rd Date: 04/06/2016
(mm/dd/yyyy)

STORET Station ID: G1WA0007 Latitude: 30.4544
(Decimal Degrees)

WBID: 7561 RQ: 2016-04-04-61 ORG ID: 21FLWQA Longitude: -84.2204
(Decimal Degrees)

Receiving Body of Water: St Marks River Field ID: G1WA0007 County: Leon

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Curtis Musson			X	X	X		X	X
Ben Ralys		X		Y			X	X
Robert Wiwi						X		X

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other: G.Hes	
Equipment ID: _____		
Collection Method		
☒ Wading	☐ Via Boat	
☐ From Shore	☐ Canoe/Kayak	
☐ Other (note below)	☐ Electric Motor	
	☐ Gasoline Motor	

Water Level: Dry / Low / Normal / High / Flooded Matrix: Fresh / Marine / DI

Meter ID# Biology 2 Photos: Yes / No Tide Falling: Yes / No / NA

Field Sample

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	10:15	0.25	0.5	9.12	99.8	6.88	0.04	VOB	96	19.72
CEN										

Biological Samples Collected: None HA SCI LVS RPS LVI Other _____

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA-5259020	9/16/2016	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
BOD	☒ BOD-UNIN	☒ Ice			
Physical/Aggregate (Kit A/C)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Kit B/D)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☒ MI-FW-QIDC	☒ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☒ ALGAE-ID	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other _____			

Contains
1:1
Sulfuric Acid
SA-5259020
EXP: 09/16/16
Warning!
See MSDS

Sticker(s) Here (if available)

QA/QC Sample Information

Duplicate

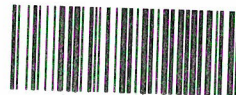
Time Zone: EST CEN		Sample Depth (m): _____		Field ID: _____	
Time: _____		Total Depth (m): _____			
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☐ Ice ☐ H ₂ SO ₄			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ < 2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll	☐ CHLSUITE-W	☐ Ice			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Kit A/C)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Kit B/D)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Blank

Time Zone: EST CEN		Time: 12:20		Field ID: G1WA0014B		Location: Caney Creek Upstream of US 90	
☒ Field Blank		☐ Equipment Blank		☐ Field Cleaned Equipment Blank		Equipment ID: _____	
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check		
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H ₂ SO ₄	SA-5259020	9/16/2016	☒ < 2		
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice	NA-5113210	4/23/2016	☒ < 2		
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	Place Preservative Sticker(s) Here (If Available)				
Chlorophyll	☒ CHLSUITE-W	☒ Ice					
BOD	☒ BOD-UNIN	☒ Ice					
Physical/Aggregate (Kit A/C)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice					
Physical/Aggregate (Kit B/D)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice					
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR	☐ Ice					
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other					

Notes:

SBIO: 75922
RPS: 7839



G1WA0007 06 April 2016
Lake Lafayette Drain 250 meters downstream of Weems Rr

Signature: *Curtis*

Date: 4-6-16

Field Parameters Entered into LIMS: CM 4-7-16

(Initials/Date)

Field Parameters QC in LIMS: BR 4/8/16

(Initials/Date)

Date Migrated to STORET: _____

(Initials/Date)

Field Sheets Scanned/Saved: CM 5-10-16

(Initials/Date)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Lake Lafayette Drain 250 meters downstream of Veras Rd. County: Leon Date: 04/06/2016 Investigators: Curtis Musson

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	1			60	1	1		
	2	1				2	1		
	3	1				3	1		
	4	1				4	1		
	5	1		96		5	3		68
	6	1				6	1		
	7	1				7	1		
	8	1				8	1		
	9	1				9	1		
3	1	6			70	1	3		
	2	6				2	6		
	3	n				3	1		
	4	n				4	1		
	5	1		87		5	1		93
	6	1				6	1		
	7	1				7	x		
	8	n				8	x		
	9	5				9	5		
4	1	6			80	1	1		
	2	6				2	1		
	3	1				3	1		
	4	n				4	1		
	5	1		35		5	1		96
	6	1				6	1		
	7	1				7	1		
	8	6				8	1		
	9	6				9	3		
2	1	5			90	1	1		
	2	1				2	1		
	3	4				3	1		
	4	x				4	1		
	5	x		45		5	1		96
	6	x				6	1		
	7	3				7	1		
	8	3				8	1		
	9	3				9	6		
2	1	4			4	1	1		
	2	5				2	1		
	3	3				3	6		
	4	1				4	4		
	5	1		96		5	5		96
	6	1				6	3		
	7	1				7	3		
	8	1				8	1		
	9	3				9	6		
2	1	4			50	1	4		
	2	1				2	1		
	3	4				3	4		
	4	1				4	1		
	5	1		94		5	1		
	6	1				6	1		
	7	1				7	1		
	8	1				8	1		
	9	1				9	1		

STORET Station Number: G1WA0007

Secchi depth VOB
Estimated? 10

points ranked 4-6 20
total points assessed 94
% points ranked 4-6 21%

Check accompanying data collected at same site/date.

Algal mat sample X
Linear Veg Survey X
Habitat Assessment X
SCI/Biorecon 505 X
Water sample X

RQ-2016-04-04-61

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

SBIO: 75922
RPS: 7839

BR 4/8/16

99-5 = 94

THX

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%.

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

SAMPLING AGENCY: Florida Department of Environmental Protection		STORET STATION NUMBER: <u>GIWA0007</u>	DATE (MM/DD/YY): <u>4/6/16</u>	RECEIVING BODY OF WATER: <u>ST. MANS</u>
REMARKS: <u>SMP</u>	COUNTY: <u>Leon</u>	LOCATION: <u>Lake Lafayette Drain</u>		FIELD ID/NAME: <u>GIWA0007</u>

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Snag Leaf Aquatic Vegetation Roots Rock Substrate Diversity <u>9</u>	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 <u>9</u> 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 <u>5</u> <u>5</u> %	Greater than 30% major productive habitat present at site (100% 83% 66% 48% 30.5%) 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent (30.4% 27% 23% 20% 16%) 15 14 13 12 11	6% to 15% major productive habitat (15% 13% 11% 9% 6%) 10 9 8 7 6	Less than 5% major productive habitat <u>5</u> 4 3 2 1
Water Velocity <u>15</u> <u>0.25</u> m/s	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 <u>15</u> 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>14</u> ----- Primary Score <u>43</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 <u>14</u> 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 <u>20</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. <u>20</u> 19 18 17 16	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 <u>+</u> , <u>+</u> , <u>+</u> Right Bank <u>5</u> Left Bank <u>7</u> If Banks are Pipe Clay, Bed Rock or Concrete at Bank full: Optimal	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. (+, +, -) 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. (+, -, -) <u>5</u> 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>10</u>	Width of vegetation greater than 18 m <u>10</u> 9	Width of vegetation > 12 to 18 m 8 7 6 (18m 15m 12m)	Width of vegetation 6 to 12 m. human activities close to system 5 4 (9m)	Less than 6 m of buffer zone due to intensive human activities 3 2 1 (6-5m) (4-3m) (< 2m)
Riparian Zone Vegetation Quality Right Bank <u>4</u> Left Bank <u>3</u> ----- Secondary Score <u>59</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. 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

102

TOTAL SCORE

Date: <u>4/6/2016</u>	Analyst: <u>Ben Ralys</u>	Signature: _____
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SBIO 75922

CM 4-8-2016 data entered

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

GIWA0007

Left Bank

Upstream

Right Bank

100

100

↓ Smothering Notes

Location: Lake Lehigh Drain

Date: 4/6/16

Sampler: Ben Ralys, Curtis M. Jenson, Robert W. W.

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

Substrates: Code key, draw proportionate habitat abundance. %

S	Snags	3.3
R	Roots/undercut banks	1.4
L	Leaf Packs (or mats)	0.02
M	Aquatic Macrophytes	0
R	Rock	0
	Total	4.8
P	Pools	total # observed = 3 # range expected = 3-6

Average width 3.0 m

Average depth .5 m

Velocity measured at 50 meter mark.

Velocity 0.25 m/s 4 seconds

WQ & chemistry taken at 100 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.

Notes/Plants Observed: 2m²

2m² = 16 Sweeps

50m left bank depth .3 vel. 6sec.
50m right bank depth .4 vel. 7.75sec

# of Sweeps	Conversion	m ²	%
Snag 80	÷ 8	10 m ²	3.3
Root 34	÷ 8	4.25 m ²	1.4
Leaf 0.5	÷ 8	0.06 m ²	0.02
Macrophyte 0	÷ 8	0 m ²	0
Rock 0	÷ 8	0 m ²	0
Total Available Habitat		14.3 m ²	4.27
Total Area		300 m ²	100
Total Unavailable Habitat		285 m ²	95.73

Meter Mark	Depth (m)	Width (m)	Velocity Measurement (Sec)
Avg.			

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

Expected Number of Pools

$$\left(\frac{100}{12 \times 3 W}\right) \cdot 1 =$$

$$\left(\frac{100}{12 \times 3 W}\right) \cdot 2 =$$

macro = present
not enough to quantify

Waterbody: Lake Lafayette Drain 250 meters downstream of Weems Rd	Date:04/06/2016	County: Jefferson	Storet Number: G1WA0007
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Signature: Alexis Muz

Comments: SMP Sampling $< 2m^2$ Vegetation

[illegible]

Indicate % cover macrophytes per section

[illegible]

>5 and ≤10% Macrophyte Coverage

>10 and $\leq 25\%$ Macrophyte Coverage

>25 and ≤50% Macrophyte Coverage

> 50% Macrophyte Coverage

x	x	y	y	x	y	x	y	x	x
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SBto 75922

Data entered CM 4-8-2016

 DEP-SOP-001/01: Form FD 9000-3 (9/19/12)
PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID G1WA0007 ORG ID 21FLWQA LATITUDE 30.4544
 COUNTY Leon STORET # G1WA0007 LONGITUDE -84.2204
 DATE 04/06/2016 TIME _____ SAMPLING AGENCY FDEP-WAS
 SITE NAME Lake Lafayette Drain 250 meters downstream of Weems Rd
 FIELD ID/NAME G1WA0007 RECEIVING BODY OF WATER St Marks River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>19.63</u> Silviculture <u>0.18</u> Field/Pasture <u>0.73</u> Agricultural <u>0.22</u> Residential <u>49.65</u> Commercial <u>22.38</u> Industry <u>5.27</u> Other (Specify) <u>Water</u> Landscape Development Intensity Index (LDI) <u>6.35</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>3.0</u> m wide <u>0.16</u> m/s <u>0.25</u> m/s <u>0.13</u> m/s <u>0.3</u> m deep <u>0.5</u> m deep <u>0.4</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) <u>8</u>			
High Water Mark: <u>1.6</u> + <u>0.5</u> = <u>2.1</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 % <u>82</u> ☐ 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 <table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT # Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td><u>3.3</u></td> <td><u>7</u></td> <td><u>—</u></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>1.4</u></td> <td><u>7</u></td> <td><u>—</u></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u>0.02</u></td> <td><u>0.5</u></td> <td><u>—</u></td> </tr> <tr> <td>Aquatic Vegetation</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>—</u></td> </tr> <tr> <td>Rock or Shell Rubble</td> <td><u>47.6</u></td> <td><u>3</u></td> <td><u>—</u></td> </tr> <tr> <td>Sand</td> <td><u>47.6</u></td> <td><u>2.5</u></td> <td><u>—</u></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>—</u></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>3.3</u>	<u>7</u>	<u>—</u>	Undercut Banks / Roots	<u>1.4</u>	<u>7</u>	<u>—</u>	Leaf Packs or Mat	<u>0.02</u>	<u>0.5</u>	<u>—</u>	Aquatic Vegetation	<u>0</u>	<u>0</u>	<u>—</u>	Rock or Shell Rubble	<u>47.6</u>	<u>3</u>	<u>—</u>	Sand	<u>47.6</u>	<u>2.5</u>	<u>—</u>	Mud / Muck / Silt	<u>0</u>	<u>0</u>	<u>—</u>	Other				Other				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. (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>1.03</u></td> </tr> <tr> <td>Mid:</td> <td><u>0.25</u></td> <td><u>19.72</u></td> <td><u>6.88</u></td> <td><u>9.12</u></td> <td><u>99.8</u></td> <td><u>96</u></td> <td><u>0.04</u></td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>—</u></td> <td><u>0.5</u></td> </tr> </tbody> </table> Meter ID: <u>Bioleck #2</u>				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>1.03</u>	Mid:	<u>0.25</u>	<u>19.72</u>	<u>6.88</u>	<u>9.12</u>	<u>99.8</u>	<u>96</u>	<u>0.04</u>	☒ VOB	Bottom:	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>0.5</u>
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Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>5259020</u> Exp: <u>9-16-16</u>			Color Tannic ☐ Green (Algae) ☐ Clear ☐ Other (Specify) ☒ <u>Gray</u>																																																																														
Algae Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>ICE</u> Exp: <u>ICE</u>			Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																																																														
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SAMPLING TEAM <u>Curtis Mussey, Robert Wiwi, Ben Ralys</u>			SIGNATURE: <u>Curtis Mussey</u>																																																																														
			DATE: <u>4-6-2016</u>																																																																														

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

Boldly "X" this box if there is qualified data on this name.

Meter **Biology #2**

RQ- **2016-04-04-61**

Project **SMP**

- Notes:** (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification **03/04/2016**

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	4/6/2016	0717	21.7	8.79	8.79	100.0	39.0	—	P	LAB
ICV	Curtis Musson	4/6/2016	0718	21.7	8.79	8.79	100.0	40.0	—	P	LAB
CCV	Curtis Musson	4/6/2016	1354	23.7	8.42	8.34	98.5	40.0	—	P	LAB
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

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; DO charge N/A.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	4/6/2016	0724	CC14162	10/15/2016	996	996	P	LAB
ICV	Curtis Musson	4/6/2016	0723	CC14162	10/15/16	996	996	P	LAB
CCV	Curtis Musson	4/6/16	1357	CC13892	7-15-16	101.1	100	P	LAB
CCV									

Report specific conductance as a whole number with no decimal figure.

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	4/6/16	0726	153035	07/2017	7.0	7.00	-8.8	P	LAB
Calibr.	Curtis Musson	4/6/16	0723	154634	07/2017	4.0	4.00	165.4	P	LAB
Calibr.	Curtis Musson	4/6/2016	0735	146934	10/2016	10.0	10.00	-194.6	P	LAB
ICV	Curtis Musson	4/6/16	0737	153035	07/2017	7.00	6.96	-9.3	P	LAB
CCV	Curtis Musson	4/6/16	1359	154634	07-2017	4.00	4.05	167.5	P	LAB
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50;

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

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

Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

Request Number: RQ-2016-04-04-61

Caney Creek, Ward Creek and Lake Lafayette Drain

Florida Department of Environmental Protection Central Laboratory Submittal Form

Page 1 of 4

last revised Nov 10, 2015

Customer: WQAP

Requester: Benjamin Ralys

Field Report Prepared By:

Curtis Mussen

Project ID: SMP

Collected By:

Curtis Mussen

Sampling Agency:

FDEP

Location Lake Lafayette Drain 250 meters downstream of Weems Rd		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 4/6/2016 Time 10:15	☒ Eastern ☐ Central	Composite end Date Time	Bottle Group(s) (See pg 2)
Field ID GIWA0007	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 9.12	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	B, C, D	
STORET # GIWA0007	Temp (C) 19.72 pH 6.88	Sample Depth 0.25	☐ ft ☒ m	Sp. Conductance (umho/cm) 96		
Latitude 30.4544 ☒ dd ☐ dms	Longitude -84.2204 ☐ dd ☐ dms	Salinity (ppt) 0.04	Comments SMP			
Location Caney Creek UPstream of US 90		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 4/6/2016 Time 12:35	☒ Eastern ☐ Central	Composite end Date Time	Bottle Group(s)
Field ID GIWA0014	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 9.01	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	A, E	
STORET # GIWA0014	Temp (C) 17.79 pH 6.71	Sample Depth 0.2	☐ ft ☒ m	Sp. Conductance (umho/cm) 57		
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) 0.03	Comments SMP			
Location Caney Creek UPstream of US 90		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 4/6/2016 Time 12:35	☐ Eastern ☐ Central	Composite end Date Time	Bottle Group(s)
Field ID GIWA0014 D	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 9.01	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	E	
STORET # GIWA0014	Temp (C) 17.79 pH 6.71	Sample Depth 0.2	☐ ft ☐ m	Sp. Conductance (umho/cm) 57		
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) 0.03	Comments Duplicate			
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date 4/6/2016 Time 12:20	☒ Eastern ☐ Central	Composite end Date Time	Bottle Group(s)
Field ID GIWA0014 B	Matrix (type, e.g., Salt, Fresh, etc) DI	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	F	
STORET #	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments Field Blank			

Relinquished By: <i>Curtis Mussen</i>	Date/Time: 4/6/2016	Shipping Method: <i>Drop off</i>	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By: <i>[Signature]</i>	Date/Time: 4-6-16/1:39
---------------------------------------	---------------------	----------------------------------	--------------	------------	------------------	------------	---------------------------------	------------------------

Group: B	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
BOD-UNIN							
Group: B	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W							
Group: B	Bottle Type:	P-500ML	# of Bottles: 2	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: B	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	1
W-PO4-F							
Group: C	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	2
MI-FW-QLDC							
Group: D	Bottle Type:	PT-50ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
ALGAL_ID							
Group: E	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
ALKALINITY							
TURBIDITY							
W-CL-IC							
W-COLOR							
W-F							
W-NO2							
W-TDS							
W-TSS							
Group: E	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
BOD-UNIN							
Group: E	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W							
Group: E	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
W-ICP							
W-ICPMS							

Printed: 4/5/2016 3:25:24 PM

Page 1 of 5

Date of Request: 17-MAR-2016
 Created By: RALYS_B On: 17-MAR-2016
 Modified By: WATTS_J On: 31-MAR-2016
 Customer: WQAP
 Project: SMP
 Division:
 District:
 Sampling Event: Caney Creek, Ward Creek and Lake Lafayette Drain

Send Coolers To:

Phone: 850-245-8443
 2600 Blair Stone Rd
 MS #3560
 Tallahassee, FL 32399-2400
 Attn: Benjamin Ralys

Program Module Number:

Priority: 3
 Event Status: A
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 31-MAR-2016
 Biology Request Reviewed By: WATTS_J On: 31-MAR-2016
 Sampling Kit Required: NO Ship on:
 Sampling Kit Shipped: YES On: 28-MAR-2016
 Sampling Kit Packed By: KITCHEN_S
 Preservatives Needed: NO
 Date to Receive Samples: 06-APR-2016

Send Final Report To:

2600 Blair Stone Rd
 MS #3560
 Tallahassee, FL 32399-2400
 Attn: Katrina Sanders

Received By:

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

Comments: Group A = 1 freshwater metals kit
 Group B = 2 freshwater (no metals) kits
 Group C = 1 SCI sample
 Group D = 2 algal samples
 Group E = 1 duplicate for freshwater metals kit
 Group F = 1 field blank for freshwater metals kit

 4 - liters of DI water for 1 field blank

 1 - case of Nitric Acid
 1 - case of Sulfuric Acid.

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO ₃ /L
Total Alkalinity		
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-F	Template: DEFAULT	(SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Fluoride		
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
TDS		
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices
TSS		
Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
BOD-UNIN	Template: DEFAULT	(SM 5210 B) BOD, NOT nitrogen-inhibited
Biochemical Oxygen Demand-5 Day		
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE

Bottle Group A (Water) With 1 Samples:

Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry
Chlorophyll/Phaeophytin Ratio		
Chlorophyll-a, Corrected		
Chlorophyll-a, Uncorrected		
Phaeophytin-a		
Bottle Type: P-500ML	Number of Bottles: 1	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
Calcium		
Chromium		
Iron		
Magnesium		
Nickel		
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
Arsenic		
Cadmium		
Copper		
Lead		
Silver		
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H2SO4
W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
Ammonia-N		
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
NO2NO3-N		
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
Total-P		
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		
Bottle Type: P-125ML	Number of Bottles: 1	Preserved With: ICE-FLTR
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		

Bottle Group B (Water) With 2 Samples:

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
Ammonia-N		
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
NO2NO3-N		
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
Total-P		
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		
Bottle Type: P-125ML	Number of Bottles: 2	Preserved With: ICE-FLTR
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		
Bottle Type: P-1L	Number of Bottles: 2	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L
Total Alkalinity		
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		

Bottle Group B (Water) With 2 Samples:

Bottle Type: P-1L	Number of Bottles: 2	Preserved With: ICE
W-COLOR	Template: DEFAULT	(SM 2120 B) True Color measured at 450 nm
Color (true)		
W-F	Template: DEFAULT	(SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Fluoride		
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
TDS		
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices
TSS		
Bottle Type: P-1L	Number of Bottles: 2	Preserved With: ICE
BOD-UNIN	Template: DEFAULT	(SM 5210 B) BOD, NOT nitrogen-inhibited
Biochemical Oxygen Demand-5 Day		
Bottle Type: BP-1L	Number of Bottles: 2	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry
Chlorophyll/Phaeophytin Ratio		
Chlorophyll-a, Corrected		
Chlorophyll-a, Uncorrected		
Phaeophytin-a		

Bottle Group C (Biological) With 1 Samples:

Bottle Type: PJ-2L	Number of Bottles: 2	Preserved With: Formalin
MI-FW-QLDC	Template: DEFAULT	(SOP-IZ06) No. Taxa of FW macroinverts, qual samp, 20 dipnets.
*Macroinvert-FW-Qual-DipnetX20-#Taxa-Rep2		
*Stream Condition Index (SCI)		

Bottle Group D (Biological) With 2 Samples:

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
*Dominant sample taxon		

Bottle Group E (Water) With 1 Samples:

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L
Total Alkalinity		
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-F	Template: DEFAULT	(SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Fluoride		
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
TDS		
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices
TSS		
Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
BOD-UNIN	Template: DEFAULT	(SM 5210 B) BOD, NOT nitrogen-inhibited
Biochemical Oxygen Demand-5 Day		
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry
Chlorophyll/Phaeophytin Ratio		
Chlorophyll-a, Corrected		
Chlorophyll-a, Uncorrected		
Phaeophytin-a		
Bottle Type: P-500ML	Number of Bottles: 1	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
Calcium		

Bottle Group E (Water) With 1 Samples:

Bottle Type: P-500ML	Number of Bottles: 1	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
Chromium		
Iron		
Magnesium		
Nickel		
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
Arsenic		
Cadmium		
Copper		
Lead		
Silver		
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H2SO4
W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
Ammonia-N		
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
NO2NO3-N		
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
Total-P		
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		

Bottle Type: P-125ML	Number of Bottles: 1	Preserved With: ICE-FLTR
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		

Bottle Group F (Water) With 1 Samples:

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L
Total Alkalinity		
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-F	Template: DEFAULT	(SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Fluoride		
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
TDS		
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices
TSS		
Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
BOD-UNIN	Template: DEFAULT	(SM 5210 B) BOD, NOT nitrogen-inhibited
Biochemical Oxygen Demand-5 Day		
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry
Chlorophyll/Phaeophytin Ratio		
Chlorophyll-a, Corrected		
Chlorophyll-a, Uncorrected		
Phaeophytin-a		
Bottle Type: P-500ML	Number of Bottles: 1	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

Bottle Group F (Water) With 1 Samples:

Bottle Type: P-500ML	Number of Bottles: 1	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
Calcium		
Chromium		
Iron		
Magnesium		
Nickel		
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
Arsenic		
Cadmium		
Copper		
Lead		
Silver		
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H2SO4
W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
Ammonia-N		
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
NO2NO3-N		
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
Total-P		
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		
Bottle Type: P-125ML	Number of Bottles: 1	Preserved With: ICE-FLTR
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		

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

Cooler Packing Worksheet for Request: RQ-2016-04-04-61

Caney Creek, Ward Creek and Lake Lafayette Drain

Ship Cooler On: 3/21/2016

Customer/Project: WQAP/SMP

Requester: Benjamin Ralys

Priority: 3

850-245-8443
2600 Blair Stone Rd
MS #3560
Tallahassee, FL 32399-2400
Attn: Benjamin Ralys

Comments:

Group A = 1 freshwater metals kit
Group B = 2 freshwater (no metals) kits
Group C = 1 SCI sample
Group D = 2 algal samples
Group E = 1 duplicate for freshwater metals kit
Group F = 1 field blank for freshwater metals kit

4 - liters of DI water for 1 field blank

1 - case of Nitric Acid

1 - case of Sulfuric Acid.

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00064196

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-NO2

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)

Nitrite in aqueous matrices as mg N/L

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 1168614
00064196

Description: Plastic Bottle 1L

Analysis

Description

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1168614

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00063982

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 # 00063982

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: ICE-FLTR

Lot # 00064632

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: B# of Sites: 2

Container ID: P-1L

Qty: 2 Preservation: ICE

Lot # 00064896

Description: Plastic Bottle 1L

Analysis

ALKALINITY

Description

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-NO2	Nitrite in aqueous matrices as mg N/L
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 2 Preservation: ICE

Lot # 00064196

Description: Plastic Bottle 1L

Analysis

BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 2 Preservation: ICE

Lot # 1168614

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 2 Preservation: ICE And H2SO4

Lot # 00063982

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: 2 Preservation: ICE-FLTR

Lot # 00064632

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: C

of Sites: 1

Container ID: PJ-2L

Qty: 2 Preservation: Formalin

Lot # BIO WASH

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

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

Bottle Group: D

of Sites: 2

Container ID: PT-50ML

Qty: 2 Preservation: ICE

Lot # 430897

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Bottle Group: E

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00064196

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-NO2

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)

Nitrite in aqueous matrices as mg N/L

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00064196

Description: Plastic Bottle 1L

Analysis

BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1168614

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00063982

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 # 00063982

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: ICE-FLTR

Lot # 00064632

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: F

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00064196

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

Description

Alkalinity in aqueous matrices as mg CaCO3/L

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-NO2	Nitrite in aqueous matrices as mg N/L
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00064196

Description: Plastic Bottle 1L

Analysis

BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1168614

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00063982

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 # 00063982

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: ICE-FLTR

Lot # 00064632

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By: SK Date: 3-28-16

DEP Cooler ID #(s): 6 coolers 5 coolers

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle (1 per cooler)
- ☐ FedEx Bills, if applicable (1 per cooler)
- ☒ Plastic Bags
- ☒ Zip Ties

If Preservation Included:

ID	<u>Sulfuric Acid exp. 7-16-16</u>	Lot #	<u>SA5259020</u>
ID		Lot #	
ID	<u>Nitric Acid exp. 4-23-16</u>	Lot #	<u>NA5113210</u>
ID		Lot #	
ID		Lot #	

PLEASE RETURN ALL COOLERS FOR RQ-2016-04-04-61