FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 12/14/2020
Customer: WAS
RQ: RQ-2020-12-14-12

Collected By: Blake Spencer, Avril Wood-McGrath
Sampling Agency: FDEP
Project ID: SMP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 3

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

Site Location	Field ID/WIN ID
Willachoochee Creek At 161	G1WA0087
Richlander Creek At Cr 65b	G1WA0093
Hurricane Creek At Us 90	G1WA0098
Double Branch At Cr159	G1WA0091
Lewis Creek Upstream Of 157	G1WA0075

RELINQUISHED BY(SIGNATURE): Avril Wood-McGrath

DATE/TIME: 12/14/20 1455

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End of Day CCV
Yes / No

WIN Station Name: Double Branch At Cr159 **Date:** 12/14/2020

WIN/Field ID: G1WA0091 **WBID:** 630 **ENR:** **Latitude:** 30.5502

County: GADSDEN **Org ID:** 21FLWQA **Longitude:** -84.4265

Receiving Body of Water: Ochlockonee - St. Marks **RQ-** 2020-12-14-12

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Blake Spencer	x		x		
[x] Avril Wood-McGrath		x		x	x
[ ]					
[ ]					

Sampling Equipment

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

Depth measured with: MeterStick

Secchi Equipment ID:

Collection Method

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

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

Meter ID# EXO #1

Photos: No **Flow:** FLOW **Tide:** **Tide Times:** High: Low:

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

SBIO ID Numbers:

Notes:

Duplicate Sample

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

WIN DMT Activity ID: _____

Blank

Time Zone: _____ **Time:** N/A **Field ID:** N/A (Blank Type_DDMMYYYY)

DI Source: N/A **Location:** N/A

DI Type: N/A **Equipment ID:** N/A

LIMS EVENT ID: WAS-SECT-2020-12-14-01 **WIN Import ID:** 21FLWQA_WAS-SECT-2020-12-14-01_03-05-2021.TXT

Enter Field Parameters, Verify Station ID In LIMS DMT: SBS 12/17/2020 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** ESB 3/4/21 (Initials/Date)

Scan/Save Field Sheets _____ (Initials/Date) **Migrate Data to WIN:** DT 3/5/21 (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2020-12-14-12
Customer: WQAP
Project ID: SMP

Collected By: Blake Spencer, Avril Wood-McGrath
Field Report Prepared By: Blake Spencer
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G1WA0091

Location: Double Branch At Cr159

Comments:
Add W-Dieldrin

Matrix: Fresh

(Check one) [X] GRAB [ ] COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C⁰)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
12/14/2020	1242 EST	9.21	96.4	17.55	6.74	0.05	0.1 [X] VOB (S)	0.1	53.7	0.02
Central Lab please use top row for login purposes										
	EST									

Parameter Suite	Parameter Methods			Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	[X] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			[X] Ice [X] H_2SO_4*	[X] <2	1	A
	Lot #	SA0293040	Exp:	10-19-21			
Metals (P-500ML)	[X] W-ICPMS [X] W-ICP [X] W-HARD			[X] Ice [X] HNO_3*	[X] <2	1	A
	Lot #	NA0038050	Exp:	2-7-21			
Filtered Nutrients (P125ML)	[X] W-PO4-F [X] Field Filtered 0.45 µm Filter			[X] Ice		1	A
	Filter Lot #	16930646					
	Syringe Lot #	0079900					
Chlorophyll (BP-1L)	[X] CHLSUITE-W			[X] Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	[X] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS			[X] Ice		1	A
Physical/Aggregate (Marine) (P-1L)	[ ] Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY			[ ] Ice			
Macroinvertebrates (PJ-2L)	[ ] MI-FW-QLDC			[ ] Formalin			
Periphyton (PT-50ML)	[ ] ALGAE-ID			[ ] Ice			
Microbiology (Contract Lab Bottle)	[X] E Coli [ ] F Coli [ ] Enterococci [ ] Contract Lab			[X] Ice		1	A
Molecular (QPCR-P-500ML)	[ ] PCR-HF183 [ ] PCR-BacR [ ] PCR-DG3 [ ] PCR-GULL2 [ ] PCR-GFD [ ]			[ ] Ice			
Tracers (BG-500ML)	[X] W-E8321-DI [X] W-E8321-MS			[X] Ice		1	A
Pesticides (BG-500ML) (BG-1L)	[ ] W-E8321-DI [ ] WE8321-MS [X] W-PSNP-TQ [X] W-CT-CL-R [ ] W-PCL-SQ-R [ ] W-CARB-AA (5 ml of MCAA** Buffer Solution)			[X] Ice		4	A
				[ ] Ice			

Name:	Signature:	Date:
Blake Spencer Avril Wood-McGrath	Avril Wood-McGrath	12/14/20

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

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: Exo #1 RQ- 2020-12-14-12 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	12/14/20	0708	20.8	753.6	8.89	8.88	99.2	—	1.118	P / F	L / F
ICV	Blake Spencer	12/14/20	0710	20.9	753.5	8.87	8.90	99.6	—	—	P / F	L / F
CCV	Avril Wood-McGrath	12/14/20	16:22	18.5	755.8	9.371	9.34	100.4			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	12/14/20	0713	1911200	12/2020	1000	1000	P / F	L / F
ICV	Blake Spencer	12/14/20	0715	1911200	12/2020	1000	1000	P / F	L / F
CCV	Avril Wood-McGrath	12/14/20	16:24	2911093	11/2021	100	103.4	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	12/14/20 ~~0719~~	0717	200407B	10/2021	7.02	20.9	7.02	-24.3	P / F	L / F
Calibr.	Blake Spencer	12/14/20	0719	200221A	09/2021	4.00	20.7	4.00	148.7	P / F	L / F
Calibr.	Blake Spencer	12/14/20	0722	1911200	06/2021	10.05	20.9	10.05	-193.0	P / F	L / F
ICV										P / F	L / F
CCV	Avril Wood-McGrath	12/14/20	16:28	200221A	09/2021	4.00	19.2	139.8	4.14	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						P / F	L / F

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

COMMENTS:

Form effective August 1, 2018

Cooler Packing Worksheet for Request: RQ-2020-12-14-12
Littler River Tribs
Ship Cooler On: 12/10/2020
Customer/Project: WAS-SECT/SMP

Assigned To: MCCOY_I
Requester: Curtis Musson
Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:
Group A: Nutrients, Metals, Tracers, W-PSNP-TQ

Packing Notes:
No Trash Bags
No FedEx Labels
1 - case of sulfuric acid/1 set of labels

Requested Analyses:

Bottle Group: A **# of Sites: 5**

Container ID: P-1L **Qty: 5** **Preservation: ICE** **Lot #** 00078481

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 (not valid for NPDES monitoring)
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: 5** **Preservation: ICE** **Lot #** 1283330

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: 5** **Preservation: ICE** **Lot #** L20045

Description: 250 ml Sterilized no tablet

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

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Container ID: BG-500ML **Qty: 12** **Preservation: ICE** **Lot #** 00078228

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

Analysis	Description
W-CT-CI-R	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization
W-DIELDRIN	Dieldrin (ultra low level) in water matrices by GC/MS/MS

Container ID: BG-500ML **Qty: 5** **Preservation: ICE** **Lot #** 00078228

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: 5** **Preservation: HNO3** **Lot #** 00078385

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

Analysis	Description
W-HARD	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
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

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Container ID: P-500ML **Qty: 5** **Preservation: ICE And H2SO4** **Lot #** 00078385

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: 5** **Preservation: FILTER-ICE** **Lot #** 00076883

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: 12** **Preservation: ICE** **Lot #** 00076957

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

Cooler Packed By: IM Number of Coolers: 5 Date: ~~12/4/20~~ 12/7/20 IM 12/7

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 H2504 LOT# SA329[illegible]40 EXP. 10/19/2021	Exp ___	Lot # ___
ID ___	Exp ___	Lot # ___
ID ___	Exp ___	Lot # ___
ID ___	Exp ___	Lot # ___
ID ___	Exp ___	Lot # ___

PLEASE RETURN ALL COOLERS FOR RQ-2020-12-14-12