

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 8/9/2021
Customer: WAS
RQ: RQ-2021-08-09-03

Collected By: Evelyn Becerra, Blake Spencer
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

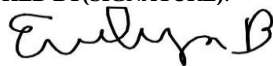
Number of Coolers Shipped: 4

Delivery Method: HandDelivered

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

Site Location	Field ID/WIN ID
Willachoochee Creek at 161	 G1WA0087
FB	 FB_08092021
Hurricane Creek At US 90	 G1WA0098
Lewis Creek Upstream of 157	 G1WA0075
Richlander Creek at CR 65B	 G1WA0093

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 8/9/2021 CEN

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Hurricane Creek At US 90 **Date:** 8/9/2021
WIN/Field ID: G1WA0098 **WBID:** 540 **ENR:** - **Latitude:** 30.554
County: GADSDEN **Org ID:** 21FLWQA **Longitude:** -84.51
Receiving Body of Water: Ochlockonee - St. Marks **RQ:** 2021-08-09-03

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Evelyn Becerra			x		
☒	Blake Spencer		x		x	x
☒	Jesse Pfadenhauer	x			x	
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: MeterStick	
Secchi Equipment ID:	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# EXO #1							
Photos: NO		Flow: FLOW		Tide:		Tide Times: High: Low:							
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:													
SBIO ID Numbers:													
Notes: HOT, HUMID													

Duplicate Sample

Time Zone: EST	Time: _____	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID: _____			

Blank

Time Zone: _____	Time: _____	Field ID: _____	(Blank Type_DDDMMYYY)
DI Source: _____	Location: _____		
DI Type: _____	Equipment ID: _____		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: WAS-SECT-2021-08-09-01 **WIN Import ID:** 21FLWQA_WAS-SECT-2021-08-09-01_09-07-2021.TXT
Enter Field Parameters, Verify Station ID In LIMS DMT: ESB 08/17/21 **QC Station ID, Field Parameters In LIMS DMT:** CLC 09/02/2021
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets ESB 08/17/21 **Migrate Data to WIN:** DT 9/7/21 **Verify Data In WIN:** _____
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-08-09-03
Customer: WQAP
Project ID: SMP

Collected By: Evelyn Becerra, Blake Spencer
Field Report Prepared By: Evelyn Becerra
Sampling Agency: FDEP

Place Label Here WIN ID/Field ID: G1WA0098 Location: Hurricane Creek At US 90						Comments:				
Matrix: Fresh						(Check one) ☒ GRAB ☐ COMPOSITE				
Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTH)
	1146 EST	7.5	93.8	26.8	7.21	0.15	0.3 ☒ VOB (S)	0.3	176.2	0.08
8/9/2021										
	EST									
Parameter Suite		Parameter Methods				Preservation		pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4*		☒ <2	1	A
		Lot #	SA0353110		Exp:	01/11/22				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A
		Lot #	NA0344060		Exp:	01/04/22				
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #	16930646							
		Syringe Lot #	1091364							
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	A
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice				
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC		Formalin Lot #	☐ Formalin					
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice				
Microbiology (Contract Lab Bottle)		☒ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab				☒ Ice			2	A
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐				☐ Ice				
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice				
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ WE8321-MS	☒ W-PSNP-TQ	☒ W-CT-CL-R	☒ Ice		8	A	
Phytoplankton/Periphyton		☐ W-PCL-TQ-R	☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ DTY-QN-C	☐ PKD-QN-BV	☐ Ice				
Name: Evelyn Becerra Blake Spencer						Signature:			Date: 8/9/21	

*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: **EXD #1**

RQ: **2021-08-09-03**

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.	Evelyn Becerra	8/9/21	7:35	21.6	759.4	8.8	8.80	100.1	-	-	P/F	L/F
ICV	Evelyn B.	8/9/21	7:40	24.0	759.7	8.4	8.44	100.5	-	-	P/F	L/F
CCV	Evelyn B.	8/9/21	14:15	24.1	759.8	8.4	8.56	102.0	-	-	P/F	L/F
CCV											P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15 (Pro DSS 0.75 to 1.50); DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Evelyn Becerra	8/9/21	7:45	201209H	12/2021	1000	1000	P/F	L/F
ICV	Evelyn Becerra	8/9/21	7:55	2911C93	11/2021	100	101.7	P/F	L/F
CCV	Evelyn B.	8/9/21	2:21PM	201209D	12/2021	1000	995	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Evelyn Becerra	8/9/21	7:58	210513A	11/2022	7.02	21.7	7.02	-23.6	P/F	L/F
Calibr.	Evelyn B.	8/9/21	8:04	210513B	11/2022	4.60	21.8	4.00	148.0	P/F	L/F
Calibr.	Evelyn B.	8/9/21	8:08	201209G	06/2022	10.04	21.9	10.04	-188.4	P/F	L/F
ICV	Evelyn B.	8/9/21	8:13	210513B	11/2022	4.00	21.7	3.99	147.5	P/F	L/F
CCV	Evelyn B.	8/9/21	2:25PM	201209G	06/2022	10.03	22.5	10.03	-189.4	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 $+180 \pm 50$; 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 $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Cooler Packing Worksheet for Request: RQ-2021-08-09-03

Little River Tribs.

Ship Cooler On: 8/5/2021

Customer/Project: WAS-SECT/SMP

Assigned To: AYRES_J

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Please return
packing list with
sample submittal
forms.

Comments:

Group A: Nutrients, CHLA, Metals, Tracers, Pesticides, E.Coli x2

Group B: Nutrients, CHLA, Metals, Tracers, E.Coli x3

Group C: Nutrients, Metals, Tracers, Pesticides x1

Packing Notes:

No FedEx Labels

No Trash Bags

1 - case sulfuric acid

1 - case nitric acid

3 vials of MCAA Buffer Sol

- use with Carb-AA sampler. -
one vial per sample.

Sampling Note:

Group A: Willacoochee, Hurrican Crk

Group B: Lewis, Double, Richlander

Group C: Field Blank

Requested Analyses:

Bottle Group: A

of Sites: 2

Container ID: P-1L

Qty: 2

Preservation: ICE

Lot # 00080514

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

W-TDS

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L

Turbidity in aqueous matrices

Chloride in aqueous matrices

True Color measured at 450 nm (not valid for NPDES monitoring)

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 2 Preservation: ICE

Lot # Blow

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-250ML-WO-THI

Qty: 2 Preservation: ICE

Lot # 03008-8TN

Description: 250 ml Sterilized no tablet

Analysis

ECOLI-18QT

Description

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

Container ID: BG-500ML

Qty: 2 Preservation: CH₂ClCOOH and Ice

Lot # 00080737

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

Analysis

W-CARB-AA

Description

Carbamates in water matrices by HPLC/MS/MS

Container ID: BG-500ML

Qty: 6 Preservation: ICE

Lot # 00080737

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

Analysis

W-CT-CI-R

Description

Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization

W-PCL-TQ-R

Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS

Container ID: BG-500ML

Qty: 2 Preservation: ICE

Lot # 00080737

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

Analysis

W-E8321-DI

Description

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: 2 Preservation: HNO₃

Lot # 00080369

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

Analysis

W-HARD

Description

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

Container ID: P-500ML

Qty: 2 Preservation: ICE And H2SO4

Lot # 00080369

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: FILTER-ICE

Lot # 00075477

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Container ID: BG-1L

Qty: 6 Preservation: ICE

Lot # 00077477

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-PSNP-TQ

Description

Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Bottle Group: B

of Sites: 3

Container ID: P-1L

Qty: 3 Preservation: ICE

Lot # 00080514

Description: Plastic Bottle 1L

Analysis

ALKALINITY
TURBIDITY
W-CL-IC
W-COLOR
W-F
W-SO4-IC
W-TDS
W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L
Turbidity in aqueous matrices
Chloride in aqueous matrices
True Color measured at 450 nm (not valid for NPDES monitoring)
Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Sulfate in aqueous matrices
Total Dissolved Solids in aqueous matrices
Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 3 Preservation: ICE

Lot # Blowers

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-250ML-WO-THI

Qty: 3

Preservation: ICE

Lot # 03008-8TN

Description: 250 ml Sterilized no tablet

Analysis

ECOLI-18QT

Description

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

Container ID: BG-500ML

Qty: 3

Preservation: ICE

Lot # 00080737

Description: Brown Glass Bottle 500ML *FILL Completely*

Affix BLUE dot to container.

Analysis

W-E8321-DI

W-E8321-MS

Description

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 3

Preservation: HNO3

Lot # 00080369

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-HARD

W-ICP

W-ICPMS

Description

Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3

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: 3

Preservation: ICE And H2SO4

Lot # 00080369

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: 3

Preservation: FILTER-ICE

Lot # 00075427

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: P-1L

Qty: 1 Preservation: ICE

Lot # 00080514

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

W-TDS

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO₃/L

Turbidity in aqueous matrices

Chloride in aqueous matrices

True Color measured at 450 nm (not valid for NPDES monitoring)

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BG-500ML

Qty: 1 Preservation: CH₂ClCOOH and Ice

Lot # 00080737

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

Analysis

W-CARB-AA

Description

Carbamates in water matrices by HPLC/MS/MS

Container ID: BG-500ML

Qty: 2 Preservation: ICE

Lot # 00080737

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

Analysis

W-CT-CI-R

W-PCL-TQ-R

Description

Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization

Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS

Container ID: BG-500ML

Qty: 1 Preservation: ICE

Lot # 00080737

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

Analysis

W-E8321-DI

W-E8321-MS

Description

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 1 Preservation: HNO₃

Lot # 00080369

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

Analysis

W-HARD

W-ICP

W-ICPMS

Description

Hardness by calculation, in aqueous matrices, reported as mg/L CaCO₃

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 # 00080369

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH3

W-NO2NO3

W-S-A-TP

W-TKN

W-TOC

Description

Ammonia in aqueous matrices as mg N/L

Nitrite/Nitrate in aqueous matrices as mg N/L

Total Phosphorus in aqueous matrices as mg P/L

Total Kjeldahl Nitrogen in aqueous matrices

Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML

Qty: 1 Preservation: FILTER-ICE

Lot # 00075427

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Container ID: BG-1L

Qty: 2 Preservation: ICE

Lot # 00077472

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-PSNP-TQ

Description

Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Cooler Packed By: 

Number of Coolers: 4

Date: 8/3/2021

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 MCAN Buffer
ID H2SO4
ID 4003
ID _____
ID _____

Exp 2/9/22
Exp 4/30/22
Exp 6/7/22
Exp _____
Exp _____

Lot # 118437
Lot # 521105060
Lot # NA 1105100
Lot # _____
Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2021-08-09-03