

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 9/7/2021
Customer: WAS
RQ: RQ-2021-09-06-12
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: 3

Delivery Method: HandDelivered

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

Site Location	Field ID/WIN ID
Double Branch at CR159	 G1WA0091
Hurricane Creek At US 90	 G1WA0098
Lewis Creek Upstream of 157	 G1WA0075
Willachoochee Creek at 161	 G1WA0087

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 9/7/2021 EST

1:11pm

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

**Rec'd/Inspected
Date:**

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 9/7/2021
Customer: WAS
RQ: RQ-2021-09-06-12
Collected By: Evelyn Becerra, Caryn Crabb
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

Delivery Method: HandDelivered

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

Site Location	Field ID/WIN ID
Richlander Creek at CR 65B	 G1WA0093

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 9/7/2021 EST

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:** 9/7/2021
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:** 2021-09-06-12

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Evelyn Becerra	x		x		
☒	Blake Spencer		x		x	x
☒	Caryn Crabb	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: HUMID, BUGGY											

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-2021-09-07-01 **WIN Import ID:** 21FLWQA_WAS-SECT-2021-09-07-01_10-5-2021.TXT
Enter Field Parameters, Verify Station ID In LIMS DMT: ESB 9/10/21 **QC Station ID, Field Parameters In LIMS DMT:** CLC 09/22/2021
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets ESB 9/10/21 **Migrate Data to WIN:** DT 10/5/21 **Verify Data In WIN:**
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-09-06-12

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 (PPT _h)		
	1108 EST	7.51	90.5	24.82	7.26	0.15	0.3 ☒ VOB (S)	0.3	137.7	0.06		
9/7/2021												
	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 #	SA0293040		Exp:	10/19/21						
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 #	17232873									
		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: <i>Evelyn Becerra</i>				Date: 9/7/21			

*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: **EXO #1**

RQ: **2021-09-06-12**

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.	Evelyn Becerra	9/7/21	7:20	21.3	755.4	8.8	8.80	99.4	-	1.06	P/F	L/F
ICV	Evelyn Becerra	9/7/21	7:43	22.0	755.7	8.7	8.76	100.4	-	-	P/F	L/F
CCV	Blake Spencer	9/7/21	13:18	25.60	755.6	8.10	8.04	98.4%	-	-	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 μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Evelyn Becerra	9/7/21	7:24	210817J	08/2022	1000	1000	P/F	L/F
ICV	Evelyn Becerra	9/7/21	7:28	4103K46	03/2023	100	100.8	P/F	L/F
CCV	Blake Spencer	9/7/21	13:21	210817J	08/2022	1000	1002	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	9/7/21	7:32	210513A	11/2022	7.02	21.8	7.02	-27.7	P/F	L/F
Calibr.	Evelyn Becerra	9/7/21	7:37	210513B	11/2022	4.00	21.9	4.00	144.6	P/F	L/F
Calibr.	Evelyn Becerra	9/7/21	7:40	201209G	06/2022	10.64	21.9	10.02	-28.0	P/F	L/F
ICV	Evelyn Becerra	9/7/21	7:43	210513B	11/2022	4.00	22.0	4.01	141.7	P/F	L/F
CCV	Blake Spencer	9/7/21	13:21	201209G	06/2022	10.03	22.37	10.03	-194.9	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 $+180 \pm 50$; 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	Evelyn B.	9/7/21	7:47	0.00	0.00	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-2021-09-06-12

Little River Tribs.

Ship Cooler On: 9/2/2021

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

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

Packing Notes:

No FedEx Labels

No Trash Bags

1 - case H₂SO₄

1 - case HNO₃

Sampling Note:

Group A: Willacoochee, Hurrican Crk

Group B: Lewis, Double, Richlander

Requested Analyses:

Bottle Group: A

of Sites: 2

Container ID: P-1L

Qty: 2

Preservation: ICE

Lot # 00080943

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 # 1326677

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 FILL TO TOP

Qty: 6

Preservation: ICE

Lot # 00080737

Description: Brown Glass Bottle 500ML *Fill Completely*

Affix BLUE dot to container.

Analysis

W-CT-Cl-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: 2

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: 2

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: 2

Preservation: ICE And H₂SO₄

Lot # 00080369

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH₃

Description

Ammonia in aqueous matrices as mg N/L

W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

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 # 00072954

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 # 0008047

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 # 00080943

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 # 1326677

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 # 00072954

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By:

IM

Number of Coolers:

4

Date:

9/1/21

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	H2SO4	E	MCAA BUFFER SOL.	Lot #	
I	LOT# SA1105060	E	SER:# 118437	#	
I	EXP: 04/30/2022	Exp	EXP: 02/09/2022	#	
ID	HNO3	Exp		Lot #	
ID	LOT# NA1105100	Exp		Lot #	
ID	EXP: 06/07/2022	Exp		Lot #	

PLEASE RETURN ALL COOLERS FOR RQ-2021-09-06-12