

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: 155072

RQ: 2021-03-22-29

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

2/9/21

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.	<u>S. Hode</u>	<u>3/22/21</u>	<u>0720</u>	<u>21.1</u>	<u>764.5</u>	<u>9.0</u>	<u>8.96</u>	<u>100.1</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>S. Hode</u>	<u>3/22/21</u>	<u>0722</u>	<u>21.1</u>	<u>764.5</u>	<u>9.0</u>	<u>8.97</u>	<u>100.3</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>S. Hode</u>	<u>3/22/21</u>	<u>1215</u>	<u>21.3</u>	<u>763.8</u>	<u>9.1</u>	<u>9.10</u>	<u>99.6</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV											<u>P/F</u>	<u>L/F</u>

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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	<u>S. Hode</u>	<u>3/22/21</u>	<u>0724</u>	<u>201013A</u>	<u>10/2021</u>	<u>100</u>	<u>100.2</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>S. Hode</u>	<u>3/22/21</u>	<u>0726</u>	<u>200127B</u>	<u>08/2021</u>	<u>1000</u>	<u>963</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>S. Hode</u>	<u>3/22/21</u>	<u>1221</u>	<u>201013A</u>	<u>10/2021</u>	<u>106</u>	<u>99.8</u>	<u>P/F</u>	<u>L/F</u>
CCV								<u>P/F</u>	<u>L/F</u>

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.	<u>S. Hode</u>	<u>3/22/21</u>	<u>0728</u>	<u>202114</u>	<u>05/2022</u>	<u>7.</u>	<u>20.9</u>	<u>7.01</u>	<u>-39.0</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>S. Hode</u>	<u>3/22/21</u>	<u>0736</u>	<u>203620</u>	<u>06/2022</u>	<u>4.</u>	<u>21.0</u>	<u>4.00</u>	<u>138.1</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>S. Hode</u>	<u>3/22/21</u>	<u>0732</u>	<u>201473</u>	<u>05/2022</u>	<u>10.</u>	<u>21.0</u>	<u>10.05</u>	<u>-211.0</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>S. Hode</u>	<u>3/22/21</u>	<u>0734</u>	<u>203620</u>	<u>06/2022</u>	<u>4.0</u>	<u>20.9</u>	<u>3.81</u>	<u>148.1</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>S. Hode</u>	<u>3/22/21</u>	<u>1223</u>	<u>202114</u>	<u>05/2022</u>	<u>7.0</u>	<u>20.6</u>	<u>7.02</u>	<u>-37.1</u>	<u>P/F</u>	<u>L/F</u>
CCV										<u>P/F</u>	<u>L/F</u>

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 10 172.0, slope from 4 to 7 177.1 (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: 2/9/21

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	<u>S. Hode</u>	<u>3/22/21</u>	<u>0735</u>	<u>0.000</u>	<u>0.000</u>	<u>P/F</u>	<u>L/F</u>

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

COMMENTS: Escambia River Run, G4NW0403, G4NW0404.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 3/22/2021
Collected By: Christopher Stopher Slade, Frank Butera
Customer: NW-DIST
Sampling Agency: FDEP
RQ: RQ-2021-03-22-29
Project ID: SMP

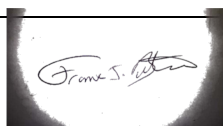
PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 1

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

Site Location	Field ID/WIN ID
Escambia River upstream of Mitchell Creek	 G4NW0404
Escambia River downstream of Cotton Lake	 G4NW0403

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 03-22-2021

16:30 ctz

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

✓ Day CCV

Yes / No

WIN Station Name: Escambia River downstream of Cotton Lake

Date: 3/22/2021

WIN/Field ID: G4NW0403

WBID: 10A

ENR:

Latitude: 30.78228

County: ESCAMBIA

Org ID: 21FLPNS

Longitude: -87.31055

Receiving Body of Water: Pensacola

RQ: 2021-03-22-29

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Frank Butera	x		x		
☒	Christopher Stopher Slade		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Meter	
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# 155077 (PRODSS)	
Photos: YES		Flow: FLOW		Tide:		Tide Times: High: Low:	
Biological Samples Collected:		☒ None	☐ HA	☐ SCI	☐ RPS	☐ Algae ID	☐ LVS ☐ LVI Other:
SBIO ID Numbers:							
Notes: CURRENT TOO STRONG FOR BOTTOM YSI MEASURE							

Duplicate Sample

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

Blank

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

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets FB 3/23/2021 Migrate Data to WIN: Verify Data In WIN:



RQ-2021-03-22-29

Customer: WQAP

Project ID: SMP

Collected By: Frank Butera, Christopher Stopher Slade

Field Report Prepared By: Frank Butera

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4NW0403

Location: Escambia River downstream of Cotton Lake

Comments: Samples taken in Central Time Zone

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)
3/22/2021	1030 CEN	8.94	91.4	17	6.5	0.3	0.5 ☐ VOB (S)	4.4	68.1	0.03
	CEN					3.9	Central Lab please use top row for login purposes			

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: 10/19/2021				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO3*	☒ <2	1	A
	Lot # NA0344060 Exp: 01/04/2022				
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # 17097890				
	Syringe Lot # 0079929				
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			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☐ Ice			
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			
	☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-DIELDRIN				
Phytoplankton/Periphyton	☐ DTM-QL-C ☐ PEN-QL-C ☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			
	☐ DTM-QN-C ☐ PRN-QN-C ☐ PKD-QN-BV ☐				

Name:
Frank Butera
Christopher Stopher Slade

Signature:

Date:

03/22/2021

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

WIN Station Name: Escambia River upstream of Mitchell Creek

Date: 3/22/2021

WIN/Field ID: G4NW0404

WBID: 10B

ENR:

Latitude: 30.863119

County: SANTA ROSA

Org ID: 21FLPNS

Longitude: -87.306206

Receiving Body of Water: Pensacola

RQ- 2021-03-22-29

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Christopher Stopher Slade		x		x	x
☒	Frank Butera	x		x		
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Meter	
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# 155077 (PRODSS)	
Photos: YES		Flow: FLOW		Tide:		Tide Times: High: Low:	
Biological Samples Collected:		☒ None	☐ HA	☐ SCI	☐ RPS	☐ Algae ID	☐ LVS ☐ LVI Other:
SBIO ID Numbers:							
Notes: HIGH FLOW							

Duplicate Sample

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

Blank

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

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets FB / 03/23/2021 Migrate Data to WIN: Verify Data In WIN:



RQ-2021-03-22-29

Customer: WQAP

Project ID: SMP

Collected By: Christopher Stopher Slade, Frank Butera

Field Report Prepared By: Christopher Stopher Slade

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4NW0404

Location: Escambia River upstream of Mitchell Creek

Comments: Samples collected in Central Time Zone

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)
3/22/2021	930 CEN	9.28	95.2	16.9	6.44	0.3	0.5 ☐ VOB (S)	3.3	68.1	0.03
	938 CEN	9.26	95	16.9	6.54	2.8	Central Lab please use top row for login purposes		68.2	0.03

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 Lot # SA293040 Exp: 10/19/2021	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD Lot # NA0344060 Exp: 01/04/2022	☒ Ice ☒ HNO3*	☒ <2	1	A
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 17097890 Syringe Lot # 0079929	☒ Ice		1	A
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			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☐ Ice			
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 ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-DIELDRIN	☐ Ice			
Phytoplankton/Periphyton	DTM-QL-C ☐ PEN-QL-C ☐ DTY-QN-C ☐ PKD-QN-C DTM-QN-C ☐ PRN-QN-C ☐ PKD-QN-BV	☐ Ice			

Name:
Christopher Stopher Slade
Frank Butera

Signature:

Date:

03/22/2021

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution