

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

Meter ID: 155077

RQ- 2021-03-15-49

Project: SNP

Boldly "X" this box if there are qualified data on this page.

- 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 2/1/21

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. m mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	NM	3/15/21	0652	22.6	762	8.7	99.18	99.1			P/F	L/F
ICV			0654	↓	↓	↓	8.59	99.2			P/F	L/F
CCV	MB		1224	22.1	763	8.8	9.09	103.7			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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	NM	3/15/21	0658	200124B	8/21	1000	1000	P/F	L/F
ICV			0700	201013A	10/21	100	103	P/F	L/F
CCV	MB		1230	201013B	10/21	50,000	46664	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.	NM	3/15/21	0702	202114	5/22	7.	23.3	7.0		P/F	L/F
Calibr.			0704	203620	6/22	4.	↓	4.0		P/F	L/F
Calibr.			0706	201473	5/22	10.	↓	10.0		P/F	L/F
ICV			0708	203620	6/22	4.0	↓	3.93	10.86	P/F	L/F
CCV	MB		1233	201473	5/22	10.0	21.6	10.03	-1960	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: 2/1/21

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	NM	3/15/21	0710	0.00	8.00	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.

REMARKS:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 3/15/2021
Customer: NW-DIST
RQ: RQ-2021-03-15-49

Collected By: Nathan Mulkey, Myranda Butler
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: 1

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

Site Location	Field ID/WIN ID
Bayou Garcon	 G5NW0152
Weekly Bayou Creek @ County Rd. 293	 G5NW0163
Weekly Bayou Middle Portion	 G5NW0157
FB	 FB_03152021

RELINQUISHED BY(SIGNATURE): *Myranda Butler*

DATE/TIME: 3/15/2021 16:00ct

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: Bayou Garcon **Date:** 3/15/2021
WIN/Field ID: G5NW0152 **WBID:** 987 **ENR:** ENRK3 **Latitude:** 30.3224
County: ESCAMBIA **Org ID:** 21FLPNS **Longitude:** -87.4337
Receiving Body of Water: Perdido **RQ:** 2021-03-15-49

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Nathan Mulkey		x		x	x
☒	Myranda Butler	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: NA		Tide: RISING		Tide Times: High: 1409 Low: 710					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers:											
Notes:											

Duplicate Sample

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

Blank

Time Zone: CEN	Time: 1055	Field ID: FB_03152021	(Blank Type_DDDMMYY)
DI Source: NW ROC Ice Room		Location: NW ROC Ice Room	
DI Type: FB		Equipment ID: NW ROC IV	
DI Container (Name/ID): NW ROC IV		DI Container Type: Carboy	

LIMS EVENT ID: _____ **WIN Import ID:** _____
Enter Field Parameters, Verify Station ID In LIMS DMT: _____ **QC Station ID, Field Parameters In LIMS DMT:** _____
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets _____ **Migrate Data to WIN:** _____ **Verify Data In WIN:** _____
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-03-15-49

Customer: WQAP

Project ID: SMP

Collected By: Nathan Mulkey, Myranda Butler

Field Report Prepared By: Nathan Mulkey

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G5NW0152

Location: Bayou Garcon

Comments:

Matrix: Marine

(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)
3/15/2021	1048 CEN	8.94	113.9	21.2	8.02	0.3	1.6 ☐ VOB (S)	1.8	34939	22.03
	1050 CEN	7.92	100.8	20.4	8.03	1.3	Central Lab please use top row for login purposes		37772	24.01

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 # SA0293040 Exp: 10/19/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
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			
Physical/Aggregate (Marine) (P-1L)	☒ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☒ Ice		1	A
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:
Nathan Mulkey
Myranda Butler

Signature:

Date:

*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: Weekly Bayou Creek @ County Rd. 293 **Date:** 3/15/2021
WIN/Field ID: G5NW0163 **WBID:** 935 **ENR:** - **Latitude:** 30.3523
County: ESCAMBIA **Org ID:** 21FLPNS **Longitude:** -87.4031
Receiving Body of Water: Perdido **RQ:** 2021-03-15-49

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Nathan Mulkey		x		x	x
☒	Myranda Butler	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: RISING		Tide Times: High: 1409 Low: 710							
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:													
SBIO ID Numbers:													
Notes:													

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: _____
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data In WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-03-15-49

Customer: WQAP

Project ID: SMP

Collected By: Nathan Mulkey, Myranda Butler

Field Report Prepared By: Nathan Mulkey

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G5NW0163

Location: Weekly Bayou Creek @ County Rd. 293

Comments: Used pole c

Matrix: Marine

(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)
3/15/2021	905 CEN	4.13	51.7	20.9	6.99	0.3	1.8 ☐ VOB (S)	2.3	31908	19.94
	910 CEN	3.29	40.7	19.8	7.09	1.8	Central Lab please use top row for login purposes		34180	21.51

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 # SA0293040 Exp: 10/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
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			
Physical/Aggregate (Marine) (P-1L)	☒ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☒ Ice		1	A
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:
Nathan Mulkey
Myranda Butler

Signature:

Date:

*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: Weekly Bayou Middle Portion **Date:** 3/15/2021
WIN/Field ID: G5NW0157 **WBID:** 935 **ENR:** - **Latitude:** 30.3492
County: ESCAMBIA **Org ID:** 21FLPNS **Longitude:** -87.4084
Receiving Body of Water: Perdido **RQ:** 2021-03-15-49

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Nathan Mulkey		x		x	x
☒	Myranda Butler	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: NA		Tide: RISING		Tide Times: High: 1409 Low: 710							
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:													
SBIO ID Numbers:													
Notes:													

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: _____
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data In WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-03-15-49

Customer: WQAP

Project ID: SMP

Collected By: Nathan Mulkey, Myranda Butler

Field Report Prepared By: Nathan Mulkey

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G5NW0157

Location: Weekly Bayou Middle Portion

Comments:

Matrix: Marine

(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)
3/15/2021	1010 CEN	6.31	81.8	22.8	7.45	0.3	1.1 ☐ VOB (S)	1.3	31995	19.97
							Central Lab please use top row for login purposes			
	CEN									

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		
	Lot # Exp:				
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			
Physical/Aggregate (Marine) (P-1L)	☒ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☒ Ice		1	A
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:
Nathan Mulkey
Myranda Butler

Signature:

Date:

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



RQ- 2021-03-15-49

Customer: WQAP

Project ID: SMP

Collected By: Nathan Mulkey, Myranda Butler

Field Report Prepared By: Nathan Mulkey, Myranda Butler

Sampling Agency: FDEP

BLANK



Field ID: FB_03152021

Comments:

Matrix: FB

(Check one) ☐ COMPOSITE ☒ GRAB

Date

Time

DI Source: NW ROC Ice Room

3/15/2021

1055

CEN

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	B
	Lot # _____ Exp: _____	10/19/21			
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ H2SO4	☐ <2		
	Lot # _____ Exp: _____				
Filtered Nutrients (P125ML)	☒ W-PO4-F Filter ☒ Field Filtered 0.45 µm	☒ Ice		1	B
	Filter Lot # 17097890				
	Syringe Lot # 0079929				
Physical/Aggregate (Fresh) (P-1L)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-IC / TDS	☐ Ice			
Physical/Aggregate (Marine) (P-1L)	☒ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☒ Ice		1	B
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				
Name: Nathan Mulkey Myranda Butler		Signature: _____		Date: _____	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution