

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: 155077

RQ- 2021-04-26-23

Project: SMO

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.	H. Schmale	5/10/21	0717	25.9	760.5	8.1	8.05	99.0			(P) F	(L) F
ICV	↓	↓	0717	25.9	760.5	8.1	8.05	99.0			(P) F	(L) F
CCV			1340	23.9	762.5	8.5	8.59	101.3			(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 umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	H. Schmale	5/10/21	0719	20124B	8/12/21	1000	1000	(P) F	(L) F
ICV	↓	↓	0721	201013A	10/21	100	99.2	(P) F	(L) F
CCV			1341	201013A	10/21	100	100.5	(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.	H. Schmale	5/10/21	0722	202114	5/12/21	7.00	25.3	7.00	-42.7	(P) F	(L) F
Calibr.	↓	↓	0726	203620	6/12/21	4.01	24.9	4.01	141.3	(P) F	(L) F
Calibr.			0728	201473	5/12/21	10.00	26.0	10.00	-221.8	(P) F	(L) F
ICV	↓	↓	0730	203620	6/12/21	4	24.6	4.06	139.4	(P) F	(L) F
CCV			1342	202114	5/12/21	7	22.4	7.02	-39.5	(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: 4/9/21

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	H. Schmale	5/10/21	0731	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.

REMARKS:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 5/10/2021
Collected By: Heather Schmuki, Christopher Stopher Slade
Customer: NW-DIST
Sampling Agency: FDEP
RQ: RQ-2021-04-26-23
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

Delivery Method: UPS

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

Site Location	Field ID/WIN ID
Lake Karick (Center) (also 33040210)	 G4NW0274
Cassidy Lake Center	 G3NW0183
FB	 FB_05102021

RELINQUISHED BY(SIGNATURE):



DATE/TIME:

05/10/21 12:00CEN

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: Lake Karick (Center) (also 33040210) **Date:** 5/10/2021
WIN/Field ID: G4NW0274 **WBID:** 145 **ENR:** **Latitude:** 30.89633
County: OKALOOSA **Org ID:** 21FLPNS **Longitude:** -86.64424
Receiving Body of Water: Pensacola **RQ:** 2021-04-26-23

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Heather Schmuki		x		x	x
☒	Christopher Stopher Slade	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: NO		Flow: NA		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers:											
Notes: "R" QUALIFIER											

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_DDDMMYYY)
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-2021-04-26-23

Customer: WQAP

Project ID: SMP

Collected By: Heather Schmuki, Christopher Stopher Slade

Field Report Prepared By: Heather Schmuki

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4NW0274

Location: Lake Karick (Center) (also 33040210)

Comments: Central time

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)
5/10/2021	920 CEN	7.93	96.6	25.3	5.84	0.3	2.3 ☐ VOB (S)	4.5	17.1	0.01
	923	8.21	92	24.7	5.5	2.0	Central Lab please use top row for login purposes		18.1	0.01
	925 CEN	1.12	12.5	20.9	4.51	4			18.4	0.01
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				☒ Ice ☒ H2SO4*		☒ <2	1	A
		Lot #	0293040	Exp:		10/19/21				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A
		Lot #	0344060	Exp:		1/4/22				
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 ☐ 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: Heather Schmuki Christopher Stopher Slade						Signature: <i>Christopher Slade</i>			Date: 05/10/2021	

*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: Cassidy Lake Center **Date:** 5/10/2021
WIN/Field ID: G3NW0183 **WBID:** 226 **ENR:** **Latitude:** 30.81620
County: HOLMES **Org ID:** 21FLPNS **Longitude:** -86.03114
Receiving Body of Water: PENSACOLA **RQ:** 2021-04-26-23

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

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Ariel	
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: No		Flow: No FLOW		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers:											
Notes: "R" QUALIFIER											

Duplicate Sample

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

Blank

Time Zone: CEN	Time: 1100	Field ID: FB_05102021 (Blank Type_DDDMMYY)
DI Source: Pensacola ice room		Location: Cassidy Lake
DI Type: Field Blank		Equipment ID:
DI Container (Name/ID): NWROC 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-2021-04-26-23

Customer: WQAP

Project ID: SMP

Collected By: Christopher Stopher Slade, Heather Schmuki

Field Report Prepared By: Christopher Stopher Slade

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G3NW0183

Location: Cassidy Lake Center

Comments: Central time

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)
5/10/2021	1050 CEN	8.35	100.4	24.6	5.38	0.3	3.5 ☐ VOB (S)	10.1	15.3	0.01
	1053	8.47	97.8	23.9	5.09	2	Central Lab please use top row for login purposes		15	0.01
	1055 CEN	3.45	35.6	16.7	4.35	9.6			17.4	0.01

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	☒ Ice ☒ H2SO4*	☒ <2	1	B
	Lot # 0293040 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	B
	Filter Lot # 17097890				
	Syringe Lot # 0079929				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	B
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	B
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	☐ Ice			
	☐ PCR-GULL2 ☐ PCR-GFD ☐				
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:
Christopher Stopher Slade
Heather Schmuki

Signature:

Christopher Slade

Date:

05/10/2021

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



RQ- 2021-04-26-23

Customer: WQAP

Project ID: SMP

Collected By: Christopher Stopher Slade, Heather Schmuki

Field Report Prepared By: Christopher Stopher Slade,

Heather Schmuki

Sampling Agency: FDEP

BLANK



Field ID: FB_05102021

Comments:

Matrix: Field Blank

(Check one) ☐ COMPOSITE ☒ GRAB

Date

Time

DI Source: Pensacola ice room

5/10/2021

1100

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	C
	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	C
	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		1	C
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ 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-DIELDIN	☐ Ice			
Name: Christopher Stopher Slade Heather Schmuki		Signature: <i>Christopher Slade</i>		Date: 05/10/2021	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution