

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: 155075

RQ-

Project: SMD 2019

- 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 9/30/19

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.	J. Burtchett	11/13/19	753	20.5	763.2	9.0	9.05	100.4	-	1.06	P/F	L/F
ICV	"	"	803	17.5	763.6	9.6	9.61	100.5	-	-	P/F	L/F
CCV	"	"	1645	18.9	761.8	9.3	9.32	100.7	-	-	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.	J. Burtchett	11/13/19	755	190618 F	06/20	1000	1000	P/F	L/F
ICV	"	"	805	2906181	08/21	100	102	P/F	L/F
CCV	"	"	1647	191017B	10/20	50000	50213	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.	J. Burtchett	11/13/19	757	190618 D	12/20	7.02	18.6	7.03	-60.2	P/F	L/F
Calibr.	"	"	759	190618 A	"	4.00	17.4	4.00	115.4	P/F	L/F
Calibr.	"	"	801	190618 C	"	10.10	16.9	10.0	-20.6	P/F	L/F
ICV	"	"	807	190618 C	"	10.08	18.2	10.01	-219.5	P/F	L/F
CCV	"	"	1649	190618 D	"	4.00	17.1	4.09	107.7	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: 9/30/19

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	J. Burtchett	11/13/19	745	0.000	0.000	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:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Mule Creek @ Mouth

Date: 11/13/2019
(mm/dd/yyyy)

WIN/ Field ID: G3TLHR0038

WBID: 1162

Latitude: 30.1137

(Decimal Degrees)

County: Bay

ORG ID: 21FTLHR

Longitude: 85.4204

(Decimal Degrees)

Receiving Body of Water: Sandy Creek

RQ- 2019-09-16-2

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Burtch					☒	☒	☒	☒	☒
B. Harder					☒	☒	☒	☒	☒

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Depth Measured with: 155075		
Equipment ID: 155075		

Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☒ Electric Motor
☐ Other	☒ Gasoline Motor

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded

Meter ID# 55075

Matrix: Fresh / Marine / DI

Photos: Yes No Flow: No Flow / Intestinal / Flowing / NA

Tide: Rising / Falling / Slack / NA

Tide Times: High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	1030	1.4	0.3	1.4	8.40	82.8	6.38	8.39	237	13.9
CEN										

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP	☒ Ice ☒ H2SO4	9203100	7/22/20	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3		20	☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CH-IC / ☒ W-COLOR / ☒ W-SO4-IC / ☒ W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / ☐ W-BR-IC / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ W-E8321-MS ☐ W-CAR8-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes:

Field/WIN ID → G3TLHR0038

Location ↓

MULE CREEK @ MOUTH

Signature: [Signature] Date: 11/13/19

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 11-15-19 (Initials/Date) Migrate Data to WIN: (Initials/Date) Verify Data In WIN: (Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Date Qualified?

Yes ☒ No ☐

WIN Station Name: Little Sandy Creek @ Mouth

Date: 11/13/2019
(mm/dd/yyyy)

WIN/ Field ID: G3TLHR0039

WBID: 1155

Latitude: 30.094

(Decimal Degrees)

County: Bay

ORG ID: 21FLTLHR

Longitude: 85.4157

(Decimal Degrees)

Receiving Body of Water: Sandy Creek

RQ- 201909-16-26

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>J. Burtchett</u>					☒	☒	☒	☒	☒
<u>B. Harder</u>					☒	☒	☒	☒	☒

Sampling Equipment			
☒ Sample Container	☒ Van Dorn	☐ Pole	
☐ Carboy	☒ Syringe		
☐ Dipper	☐ Other		
Depth Measured with <u>PRODS</u>			
Equipment ID <u>135075</u>			

Collection Method			
☐ Wading	☐ Canoe/Kayak		
☐ From Shore	☐ Electric Motor		
☐ Other	☒ Gasoline Motor		

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded
Photos: Yes / No / Flow: No Flow / Intestinal / Flowing / NA
Meter ID# 55075 Matrix: Fresh Marine / DI
Tide: Rising / Falling / Slack / NA Tide Times: High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1045	1.7	0.3	1.7	4.49	56.0	6.95	4.56	30006	19.8
CEN			1.2	1.7	4.02	47.3	6.80	3991	23144	19.0

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	<u>7203KU</u>	<u>7/22/20</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☐ Ice			
Physical/Aggregate (Fresh)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☒ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes:

Field/WIN ID → G3TLHR0039
Location ↓ LITTLE SANDY CREEK @ MOUTH

Signature: [Signature] Date: 11/13/19

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 11-15-19 Migrate Data to WIN: Verify Data In WIN:

**Florida Department of Environmental Protection
Central Laboratory Submittal Form**

Customer: TLH-ROC

Project ID: SMP

Requester: Michael Eckles

Collected By:

Field Report Prepared By:

Sampling Agency: 8034

Location	Field/WIN ID →		Collection (comp begin or grab)		Composite end		Bottle Group(s)
Field ID	Location →		Comp	Date	Time	Date	(See pg 2)
WIN/STORE #			Grab	11/13/19	1330		A
Latitude	Longitude		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine
			Fresh		8.40		
			Temp (C)	pH	Sample Depth		Sp. Conductance
			13.9	6.35	0.3		2309
			Salinity (ppt)	Comments			
			8.39				
Location	Field/WIN ID →		Collection (comp begin or grab)		Composite end		Bottle Group(s)
Field ID	Location →		Comp	Date	Time	Date	
WIN/STORE #			Grab	11/13/19	1045		A
Latitude	Longitude		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine
			Fresh Salt		4.49		
			Temp (C)	pH	Sample Depth		Sp. Conductance
			19.8	6.95	0.3		23144
			Salinity (ppt)	Comments			
Location	Field ID		Collection (comp begin or grab)		Composite end		Bottle Group(s)
			Comp	Date	Time	Date	
			Grab				
			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine
			Temp (C)	pH	Sample Depth		Sp. Conductance
			Salinity (ppt)	Comments			
Location	Field ID		Collection (comp begin or grab)		Composite end		Bottle Group(s)
			Comp	Date	Time	Date	
			Grab				
			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine
			Temp (C)	pH	Sample Depth		Sp. Conductance
			Salinity (ppt)	Comments			
Location	Field ID		Collection (comp begin or grab)		Composite end		Bottle Group(s)
			Comp	Date	Time	Date	
			Grab				
			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine
			Temp (C)	pH	Sample Depth		Sp. Conductance
			Salinity (ppt)	Comments			

Relinquished By: JB BH	Date/Time 11/13/14 1513	Shipping Method HD	Number of Coolers Shipped: 1	Received By: AEG	Date/Time 11-13-14 1515
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Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	CHLSUITE-W						
Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	ECOL-18QT						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	2
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	FILTER+ICE	Enter Number of Bottles Sent to Lab	2
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	ALKALINITY						
	TURBIDITY						
	W-BR-IC						
	W-F						
	W-TSS						
Group: B	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	CHLSUITE-W						
Group: B	Bottle Type:	P-250ML-WO-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	ENT-24-QT						
Group: B	Bottle Type:	P-250ML-WO-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	FCOLL-MF						