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: 154177 RQ- RQ-2019-07-08-50 2019-09-09-33 Project: 2019 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 07/19

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.	Ben Harden	09/11/19	0749	21.8	761.9	8.8	8.80	100.4		0.97	P / F	L / F
ICV	"	"	0801	21.4	762.0	8.9	8.87	100.3			P / F	L / F
CCV	"	"	1453	25.1	760.2	8.2	8.27	100.3			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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Ben Harden	09/11/19	0751	190618F	06/20	1000	1000	P / F	L / F
ICV	"	"	0752	2908C81	08/21	100.0	102.4	P / F	L / F
CCV	"	"	1454	2908C81	08/21	100.0	100.5	P / F	L / F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 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.	Ben Harden	09/11/19	0754	190618B	12/20	7.02	21.4	7.02	-20.1	P / F	L / F
Calibr.	"	"	0756	190618A	12/20	4.00	21.6	4.00	153.8	P / F	L / F
Calibr.	"	"	0757	190618C	12/20	10.04	21.4	10.04	-185.3	P / F	L / F
ICV	"	"	0759	"	"	10.04	21.5	10.07	-186.8	P / F	L / F
CCV	"	"	1500	190618A	12/20	4.00	24.2	4.05	153.7	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 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 165.2, slope from 4 to 7 173.9 (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: 07/19
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	Ben Harden	09/11/19	0745	0.000	0.000	P / F	L / F

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

COMMENTS:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? Yes / No

WIN Station Name: Unnamed Branch @ Hardaway Rd 2 **Date:** 09/11/2019 (mm/dd/yyyy)

WIN/ Field ID: G2TLHR0041 **WBID:** 488 **Latitude:** 30.6306 (Decimal Degrees)

County: Gadsden **ORG ID:** 21FLTLHR **Longitude:** 84.7664 (Decimal Degrees)

Receiving Body of Water: Flat Creek **RQ-** 2019-09-09-33

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Burtchett	✓		✓		
B. Harder		✓		✓	✓

Sampling Equipment
- ☑ Sample Container ☐ Van Dorn ☐ Pole
- ☐ Carboy ☑ Syringe
- ☐ Dipper ☐ Other
- Depth Measured with Pro DSS
- Equipment ID 154177

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

Water Level: Dry/ Pooled/ (Low) / Normal / High / Flooded **Meter ID#** 154177 **Matrix:** (Fresh) / Marine / DI

Photos: Yes (No) **Flow:** No Flow / Intestital / (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 (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
(EST)	935	0.1	0.05	0.1 (S)	7.88	93.7	5.71	0.01	26.7	24.0
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 ☑ H_2SO_4	9124100	5/9/20	☑ <2
Metals	☑ W-ICPMS ☑ W-ICP	☑ Ice ☐ HNO_3	9129070	5/9/20	☐ <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				

Place Preservative Sticker(s) Here (If Available)

Notes:

Field/WIN ID → G2TLHR0041

Location ↓ Unnamed Branch @ Hardaway Rd 2

Signature: [signature] **Date:** 09/11/19

LIMS EVENT ID: _____ **WIN Import ID:** _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** _____ (Initials/Date)

Scan/Save Field Sheets _____ (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

Data Qualified? Yes / No

WIN Station Name: South Mosquito Creek @ Power Line **Date:** 09/11/2019 (mm/dd/yyyy)

WIN/ Field ID: G2TLHR0039 **WBID:** 393 **Latitude:** 30.6575 ~~30.6847~~ (Decimal Degrees)

County: Gadsden **ORG ID:** 21FLTLHR **Longitude:** 84.7143 ~~84.809~~ (Decimal Degrees)

Receiving Body of Water: Mosquito Creek **RQ-** 2019-09-09-33

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Burkhead	✓		✓		
B. Harden		✓		✓	✓

Sampling Equipment
- ☑ Sample Container ☐ Van Dorn ☐ Pole
- ☐ Carboy ☑ Syringe
- ☐ Dipper ☐ Other
- Depth Measured with Prowss
- Equipment ID 154177

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

Water Level: Dry/ Pooled/ Low / (Normal) / High / Flooded **Meter ID#** 154177 **Matrix:** (Fresh) / Marine / DI

Photos: Yes / (No) **Flow:** No Flow / Intestital / (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 (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
(EST)	1010	0.4	0.2	0.4 (3)	7.91	94.1	6.84	0.03	59.8	24.1
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 ☑ H_2SO_4	9129100	5/9/20	☑ <2
Metals	☑ W-ICPMS ☐ W-ICP	☑ Ice ☐ HNO_3	9129070	5/9/20	☑ <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				

Place Preservative Sticker(s) Here (If Available)

Notes:

Marilyn Campbell 850 663-4168
850 933-3950

Field/WIN ID → G2TLHR0039

Location ↓

South Mosquito Creek @ Power Line

Signature: [signature] **Date:** 09/11/19

LIMS EVENT ID: _____ **WIN Import ID:** _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** _____ (Initials/Date)

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

Request Number: RQ-2019-09-09-33

Run 4

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: TLH-ROC

Project ID: SMP

Requester: Michael Eckles

Collected By: J. Burtchett, B. Harden

Field Report Prepared By: J. Burtchett

Sampling Agency: 8034

Location: Unnamed Branch @ Hardaway Rd 2

Field/WIN ID → G2TLHR0041

Location ↓

Latitude ☐ dd ☐ dms

☑ Grab ☐ Comp — Collection (comp begin or grab) Date 09/11/19 Time 935 — Eastern / Central — Composite end Date — Time —

Bottle Group(s) (See pg 2): A

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen: 7.88 ☑ mg/L ☐ % sat

Total Res. Chlorine (mg/L): —

Temp (C): 24.0

pH: 5.71

Sample Depth: 0.05 ☐ ft ☑ m

Sp. Conductance (umho/cm): 26.7

Salinity (ppt): 00

Comments:

Location: South Mosquito Creek @ Power Line

Field/WIN ID → G2TLHR0039

Location ↓

Latitude ☐ dd ☐ dms

☑ Grab ☐ Comp — Collection (comp begin or grab) Date 09/11/19 Time 1010 — Eastern / Central — Composite end Date — Time —

Bottle Group(s): A

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen: 7.91 ☑ mg/L ☐ % sat

Total Res. Chlorine (mg/L)

Temp (C): 24.1

pH: 6.84

Sample Depth: 0.2 ☐ ft ☑ m

Sp. Conductance (umho/cm): 59.8

Salinity (ppt): 0.03

Comments:

Location:

Field ID

WIN/STORET #

Latitude ☐ dd ☐ dms — Longitude ☐ dd ☐ dms

☐ Grab ☐ Comp — Collection (comp begin or grab) Date Time — Eastern / Central — Composite end Date Time

Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc)

Diss. Oxygen ☐ mg/L ☐ % sat — Total Res. Chlorine (mg/L)

Temp (C)

pH

Sample Depth ☐ ft ☐ m

Sp. Conductance (umho/cm)

Salinity (ppt)

Comments:

Location:

Field ID

WIN/STORET #

Latitude ☐ dd ☐ dms — Longitude ☐ dd ☐ dms

☐ Grab ☐ Comp — Collection (comp begin or grab) Date Time — Eastern / Central — Composite end Date Time

Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc)

Diss. Oxygen ☐ mg/L ☐ % sat — Total Res. Chlorine (mg/L)

Temp (C)

pH

Sample Depth ☐ ft ☐ m

Sp. Conductance (umho/cm)

Salinity (ppt)

Comments:

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
JB, BH	09/11/19 1442	HD	1		9/11/19 1443

Group: A	Bottle Type:	P-1L	# of Bottles: 3	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: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
	CHLSUITE-W						
Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
	ECOLI-18QT						
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	HNO3	**Enter Number of Bottles Sent to Lab**	2
	W-ICP W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	ICE And H2SO4 912910C exp. 5/9/20	**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: 3	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-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS						