

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: 2019-07-15-31

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	08/08/19	0756	21.2	755.2	9.8	8.83	99.4		6.840	P / F	D / F
ICV	"	"	0816	20.5	755.9	9.0	9.02	100.3			P / F	D / F
CCV	"	"	1521	25.6	755.9	8.1	8.14	99.7			P / F	D / 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.	Ben Harden	08/08/19	0759	190618F	06/20	1000	100	P / F	D / F
ICV	"	"	0801	296F63	05/21	100.0	102.1	P / F	D / F
CCV	"	"	1522	190618F	06/20	1000	1006	P / F	D / 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.	Ben Harden	08/08/19	0706	190621E	01/20	7.03	19.2	7.02	-16.9	P / F	D / F
Calibr.	"	"	0809	190618A	12/20	4.00	19.5	4.00	158.7	P / F	D / F
Calibr.	"	"	0811	190621F	01/20	10.06	20.0	10.06	-185.9	P / F	D / F
ICV	"	"	0813	"	"	10.06	20.2	10.08	-187.1	P / F	D / F
CCV	"	"	1525	190618A	12/20	4.00	21.0	4.12	152.3	P / F	D / 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 10 167.0, slope from 4 to 7 175.6 (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	08/08/19	0751	0.272	0.272	P / F	D / 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: Major Lake Center

Date: 08/08/2019
(mm/dd/yyyy)

WIN/ Field ID: G3TLHR0011

WBID: 526B

Latitude: 30.4982

County: Washington

ORG ID: 21FTLHR

Longitude: 85.7144
(Decimal Degrees)

Receiving Body of Water: NA

RQ- 2019-07-15-31
(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Ben Harden									
Paul Blay									

Sampling Equipment		
☐ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	

Depth Measured with Equipment ID

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# 154172
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 (umhos/cm)	Temp. (C°)
EST	1130	6.3	0.3	4.7	6.74	90.8	4.96	0.01	15.2	31.1
CEN	1133		5.8		0.56	6.9	4.54	0.01	18.1	26.2

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	SA9129100	8/09/20	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <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-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	☐ Ice			

Notes:

Field/WIN ID → G3TLHR0011
Location ↓

MAJOR LAKE CENTER

Signature: [Signature] Date: 08/08/19

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 08-9-19 Migrate Data to WIN: Verify Data In WIN:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Crystal Lake Center

Date: 08/08/2019
(mm/dd/yyyy)

WIN/ Field ID: G3TLHR0012

WBID: 795A

Latitude: 30.4531

County: Washington

ORG ID: 21FTLHR

Longitude: 85.7027
(Decimal Degrees)

Receiving Body of Water: NA

RQ: 2019-07-15-31
(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Ben Harden									
Paul Blair									

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

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# 154177 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	1215	22.0	0.3	5.2	7.69	103.5	6.50	0.01	30.6	30.9
CEN	1218		9.8		8.90	110.2	6.11	0.01	29.5	26.0

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	5/19/29/10	05/19/20	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUTE-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: Ran out of cable on the PROBSS, so bottom sample at 9.8m instead of 23.15m

Field/WIN ID →
Location ↓

G3TLHR0012

CRYSTAL LAKE CENTER

Date: 08/08/2019

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 26 8-9-19 Migrate Data to WIN: Verify Data in WIN:
(Initials/Date) (Initials/Date) (Initials/Date) (Initials/Date)

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: TLH-ROC

Project ID: SMP

Requester: Michael Eckles

Collected By: Blair, HardenField Report Prepared By: Blair, HardenSampling Agency: 2034

G3TLHR0011



MAJOR LAKE CENTER

Latitude Longitude

☐ dd ☐ dms

G3TLHR0012



CRYSTAL LAKE CENTER

Latitude Longitude

☐ dd ☐ dms

☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>08/08/2019</u> Time <u>1:30</u>	Composite end Date	Eastern Central	Time	Bottle Group(s) (See pg 2)
Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>	Diss. Oxygen <u>6.74</u>	mg/L Total Res. Chlorine <u>---</u>	☒ mg/L ☐ % sat		
Temp (C) <u>31.1</u>	pH <u>4.96</u>	Sp. Conductance (umho/cm) <u>15.2</u>	☐ ft ☒ m		<u>A</u>
Salinity (ppt) <u>0.01</u>	Comments				

☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>08/08/2019</u> Time <u>12:15</u>	Composite end Date	Eastern Central	Time	Bottle Group(s) (See pg 2)
Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>	Diss. Oxygen <u>7.69</u>	mg/L Total Res. Chlorine <u>---</u>	☒ mg/L ☐ % sat		
Temp (C) <u>30.7</u>	pH <u>6.50</u>	Sp. Conductance (umho/cm) <u>30.6</u>	☐ ft ☒ m		<u>A</u>
Salinity (ppt) <u>0.01</u>	Comments				

☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Composite end Date	Eastern Central	Time	Bottle Group(s)
Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L Total Res. Chlorine	☐ mg/L ☐ % sat		
Temp (C)	pH	Sp. Conductance (umho/cm)	☐ ft ☐ m		
Salinity (ppt)	Comments				

☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Composite end Date	Eastern Central	Time	Bottle Group(s)
Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L Total Res. Chlorine	☐ mg/L ☐ % sat		
Temp (C)	pH	Sp. Conductance (umho/cm)	☐ ft ☐ m		
Salinity (ppt)	Comments				

Relinquished By: <u>Blair, Harden</u>	Date/Time: <u>08/08/19</u>	Shipping Method: <u>Hand Delivered</u>	Number of Coolers Shipped: <u>1</u>	Received By: <u>[Signature]</u>	Date/Time: <u>8/8/19 15:20</u>
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Group: A	Bottle Type:	P-1L	# of Bottles: 5	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: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 5	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: 5	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	2
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 2	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						
Group: B	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	CHLSUITE-W						
Group: B	Bottle Type:	P-250ML-WO-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	ECOLI-18QT						
Group: B	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	