

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-2019-09-30-08

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 10/19

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	10/28/19	0805	20.2	7528	9.0	9.01	99.6%		0.9810	P/F	L/F
ICV	"	"	0816	19.3	7578	9.2	9.18	99.6%			P/F	L/F
CCV	"	"	1548	25.9	7520	8.1	8.13	100.1			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.	Ben Harden	10/28/19	0807	1906R8F	06/20	1000	1002	P/F	L/F
ICV	"	"	0808	2906R81	08/21	100.0	101.9	P/F	L/F
CCV	"	"	1549	"	"	"	101.2	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.	Ben Harden	10/28/19	0809	1906R8	12/20	7.02	20.5	7.02	-216	P/F	L/F
Calibr.	"	"	0812	1906R8A	12/20	4.00	19.3	4.00	152.7	P/F	L/F
Calibr.	"	"	0813	1906R8C	12/20	10.07	19.3	10.07	-189.9	P/F	L/F
ICV	"	"	0814	"	"	10.07	19.5	10.08	-192.8	P/F	L/F
CCV	"	"	1553	1906R8A	12/20	4.00	19.9	4.02	150.2	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 10 168.3, slope from 4 to 7 174.3 (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: 10/19

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	10/28/19	0803	0.272	0.273	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

Data Qualified?

Yes / No

January 2019

WIN Station Name: Rattlesnake Lake CenterDate: 10/28/2019
(mm/dd/yyyy)WIN/ Field ID: G3TLHR0013WBID: 780ALatitude: 30.4598County: WashingtonORG ID: 21FTLHRLongitude: 85.5664
(Decimal Degrees)Receiving Body of Water: NARQ- 2019-09-30-08
(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
<u>Ken Harden</u> <u>San Woods</u>					☒	☒	☒	☒	☒	☒ 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 / <u>Normal</u> / High / Flooded					Meter ID# <u>154177</u>					Matrix: <u>Fresh</u> / Marine / DI				
Photos: Yes / No					Flow: No Flow / Intestinal / Flowing <u>NA</u>					Tide: Rising/ Falling/ Slack/ <u>NA</u>				
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 (umhos/cm)	Temp. (C°)				
EST	1135	7.7	0.3	2.9	7.34	86.3	5.21	0.00	12.7	23.5				
CEN	1136		7.2		0.34	88.7	5.33	0.01	26.4	19.2				
Biological Samples Collected: <u>None</u> 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 ₂ SO ₄	<u>5A9203100</u>	<u>07/20/20</u>	☒ <2					
Metals	☐ W-ICPMS ☐ W-ICP					☐ Ice ☐ HNO ₃			☐ <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					☐ Ice								
	☐ PCR-HF1B3 ☐ PCR-DG3 ☐ PCR-GFD					☐ Ice								
Tracers	☐ W-E8321-DI ☐ W-E8321-MS					☐ Ice								
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI					☐ Ice								
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA					☐ Ice								
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C													

Notes:

Field/WIN ID →

Location ↓



G3TLHR0013



RATTLESNAKE LAKE CENTER

Signature: [Signature]Date: 10/28/2019

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 10/31/19
(Initials/Date)

Migrate Data to WIN:

(Initials/Date)

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: **Crystal lake Center**

Date: **10/28/2019**
(mm/dd/yyyy)

WIN/ Field ID: **G3TLHR0012**

WBID: **795A**

Latitude: **30.4531**

(Decimal Degrees)

County: **Washington**

ORG ID: **21FTLHR**

Longitude: **85.7027**

(Decimal Degrees)

Receiving Body of Water: **NA**

RQ: **2019-09-30-06**

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment									
Ben Harden Sam Woods					☒	☒	☒	☒	☒	☒ 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 / <u>Normal</u> / High / Flooded					Meter ID# 154177					Matrix: <u>Fresh</u> / Marine / DI									
Photos: Yes / <u>No</u>					Flow: No Flow / Intertidal / Flowing / <u>NA</u>					Tide: Rising/ Falling/ Slack/ <u>NA</u>					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°)									
<u>EST</u>	1250	22.0	0.3	6.4	8.30	99.9	6.72	0.01	30.4	24.6									
CEN			9.8			8.22	98.2	6.73	0.01	30.3	24.3								
Biological Samples Collected: <u>None</u> 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		5A9203100	07/02/20	☒ <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																	

Notes: **Bottom reading taken at furthest extent of cord for probes**

Field/WIN ID →
Location ↓



G3TLHR0012



CRYSTAL LAKE CENTER

Signature: **[Signature]**

Date: **10/28/2019**

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 **10/30/19** (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

Data Qualified?
Yes / No

WIN Station Name: Dunford Lake

Date: 10/28/2019
(mm/dd/yyyy)

WIN/ Field ID: G3TLHR0010

WBID: 526A

Latitude: 30.55016

(Decimal Degrees)

County: Washington

ORG ID: 21FTLHR

Longitude: 85.6795

(Decimal Degrees)

Receiving Body of Water: Lucas Lake?

RQ: 2019-09-30-06

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment									
<u>Ben Harden</u> <u>San Woods</u>					☒	☒	☒	☒	☒	☒ 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 / <u>Normal</u> / High / Flooded					Meter ID# <u>154177</u>					Matrix: <u>Fresh</u> / Marine / DI									
Photos: Yes / <u>No</u>					Flow: No Flow / Intestinal / Flowing <u>NA</u>					Tide: Rising/ Falling/ Slack/ <u>NA</u>					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	1325	6.3	0.3	4.1	7.57	91.1	5.08	0.00	13.5	24.6									
CEN	1328		5.9		7.00	81.8	5.09	0.01	14.0	23.1									
Biological Samples Collected: <u>None</u> 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 ₂ SO ₄		<u>SA9203100</u>	<u>07/22/16</u>	☒ <2									
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO ₃				☐ <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 →
Location ↓



G3TLHR0010



DUNFORD LAKE

Signature: [Signature]

Date: 10/28/2019

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

10/31/19

Migrate Data to WIN:

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: TLH-ROC

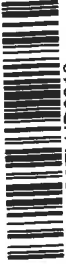
Project ID: SMP

Requester: Michael Eckles

Field Report Prepared By: Woods/Harden

Collected By: Woods/Harden

Sampling Agency: 4054

Field/WIN ID → Location →	 G3TLHR0013	 RATTLESNAKE LAKE CENTER dd dms dd dms	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 10/28/2019 Time 1335	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 7.34	Total Res. Chlorine mg/L % sat	Sp. Conductance (umho/cm) ft m	Composite end Date Time	Bottle Group(s) (See pg 2)
Latitude										A
Field/WIN ID → Location →	 G3TLHR0012	 CRYSTAL LAKE CENTER dd dms dd dms	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 10/28/2019 Time 1250	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 8.30	Total Res. Chlorine mg/L % sat	Sp. Conductance (umho/cm) ft m	Composite end Date Time	Bottle Group(s)
Latitude										A
Field/WIN ID → Location →	 G3TLHR0010	 DUNFORD LAKE dd dms dd dms	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 10/28/2019 Time 1325	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 7.52	Total Res. Chlorine mg/L % sat	Sp. Conductance (umho/cm) ft m	Composite end Date Time	Bottle Group(s)
Latitude										A
Field ID										
WIN/STORET #										
Latitude										

Relinquished By: Woods/Harden	Date/Time 10/28/2019	Shipping Method Hand Delivered	Number of Coolers Shipped:	Received By: Ian McCoy	Date/Time 10/28/19 15:45
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Group: B	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 2	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab
Group: B	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 2	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab
Group: C	Bottle Type: ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS	P-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab
Group: C	Bottle Type: ECOLI-18QT	P-250ML-WO-THI	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab
Group: C	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab
Group: C	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab