

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: Starz

RQ: 2019-10-28-20

Project: Neelose / Interacton

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 10/2019

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.	<u>Starz</u>	<u>10/31/19</u>	<u>727</u>	<u>24.4</u>	<u>757.4</u>	<u>8.3</u>	<u>8.34</u>	<u>99.7</u>	<u>—</u>	<u>1.03</u>	<u>(P) F</u>	<u>(L) F</u>
ICV	<u>L</u>	<u>+</u>	<u>728</u>	<u>24.4</u>	<u>757.4</u>	<u>8.3</u>	<u>8.34</u>	<u>99.7</u>	<u>—</u>	<u>1.03</u>	<u>(B) F</u>	<u>(L) F</u>
CCV	<u>Brian Davis</u>	<u>10</u>	<u>1434</u>	<u>24.2</u>	<u>756</u>	<u>8.3</u>	<u>8.16</u>	<u>99.6</u>	<u>—</u>	<u>1.03</u>	<u>(P) F</u>	<u>(L) F</u>
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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	<u>Starz</u>	<u>10/31/19</u>	<u>730</u>	<u>190711B</u>	<u>7/20</u>	<u>1000</u>	<u>1000</u>	<u>(P) F</u>	<u>L / F</u>
ICV	<u>L</u>	<u>+</u>	<u>731</u>	<u>190711A</u>	<u>7/20</u>	<u>100</u>	<u>100</u>	<u>(P) F</u>	<u>L / F</u>
CCV	<u>Brian Davis</u>	<u>10</u>	<u>1436</u>	<u>190711B</u>	<u>7/20</u>	<u>1000</u>	<u>1002</u>	<u>(P) F</u>	<u>(L) F</u>
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.	<u>Starz</u>	<u>10/31/19</u>	<u>735</u>	<u>2902778</u>	<u>1/21</u>	<u>7.</u>	<u>24.8</u>	<u>7.00</u>	<u>-17.8</u>	<u>(P) F</u>	<u>L / F</u>
Calibr.	<u>L</u>	<u>+</u>	<u>739</u>	<u>2904800</u>	<u>3/21</u>	<u>4.</u>	<u>24.8</u>	<u>4.01</u>	<u>167.4</u>	<u>(P) F</u>	<u>L / F</u>
Calibr.	<u>L</u>	<u>+</u>	<u>740</u>	<u>2810555</u>	<u>4/20</u>	<u>10.</u>	<u>24.8</u>	<u>10.00</u>	<u>-180.4</u>	<u>(P) F</u>	<u>L / F</u>
ICV	<u>L</u>	<u>+</u>	<u>741</u>	<u>2904800</u>	<u>3/20</u>	<u>4.</u>	<u>24.8</u>	<u>3.92</u>	<u>170.6</u>	<u>(P) F</u>	<u>L / F</u>
CCV	<u>Brian Davis</u>	<u>10/31/19</u>	<u>1440</u>	<u>2902778</u>	<u>1/21</u>	<u>7.0</u>	<u>25.0</u>	<u>6.99</u>	<u>-8.7</u>	<u>(P) F</u>	<u>(L) F</u>
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: _____

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	<u>Starz</u>	<u>10/31/19</u>	<u>742</u>	<u>0.0</u>	<u>0.0</u>	<u>(P) F</u>	<u>L / F</u>

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: Smith lake CenterDate: 10/31/19

(mm/dd/yyyy)

WIN/ Field ID: G2NE1156WBID: 2528ALatitude: 29.79591

(Decimal Degrees)

County: PutnamORG ID: 21FLALongitude: -81.95150

(Decimal Degrees)

Receiving Body of Water: _____

RQ-2019- 10-28-20

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
The Brian Davis		☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole
Jeremy Parrish		☐	☒	☒	☒	☒	☐ Carboy	☐ Syringe	
							☐ Dipper	☐ Other	
							Depth Measured with <u>Steel Stitch</u>		
							Equipment ID <u>001603</u>		
							Collection Method		
							☐ Wading	☒ Canoe/Kayak	
							☐ From Shore	☐ Electric Motor	
							☐ Other	☐ Gasoline Motor	

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

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	1235	2.0	0.3	1.7	4.35	54.4	4.90	0.01	27.7	26.4
CEN	1235		1.4		0.45	5.8	4.79	0.01	30.0	24.9

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			☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice	<u>R9HA86875</u>		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-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-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes:

WIN ID / Field ID:



G2NE1156

Smith lake Center

Signature: [Signature]

Date:

10/31/19

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)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: ROSS LAKE CENTER

Date: 10/31/19
(mm/dd/yyyy)

WIN/ Field ID: 20030454

WBID: 2543F

Latitude: 29.7010

(Decimal Degrees)

County: Putnam

ORG ID: 21FLA

Longitude: 81.9963

(Decimal Degrees)

Receiving Body of Water: Long Lake Drain

RQ-2019- 10-28-20

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
The Brian Davis					☒	☒	☒	☒	☒
Jeremy Parrish					☒	☒	☒	☒	☒

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>5' stick</u>		
Equipment ID <u>047043</u>		
Collection Method		
☐ Wading	☒ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# 5' stick 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 (µmhos/cm)	Temp. (C°)
EST	1010	3.2	0.3	0.4	4.94	60.9	4.53	0.03	70.9	26.1
CEN	1013		2.5		3.54	42.7	4.46	0.03	71.2	25.0

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			☐ <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-CI-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-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 ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes:

WIN ID/Field ID:



20030454

Ross Lake Center

Signature: B - D -

Date: 10/31/19

LIMS EVENT ID: WIN Import ID: QC Station ID, Field Parameters In LIMS DMT: (Initials/Date)

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

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

(Initials/Date)

(Initials/Date)

(Initials/Date)

Request Number: RQ-2019-10-28-20

Interlachen 1, 2 and Melrose

Florida Department of Environmental Protection Central Laboratory Submittal Form

Page 1 of 3

last revised Jan 25, 2018

Customer: NE-DIST

Project ID: SMP

Requester: Jeremy M. ParrishField Report Prepared By: Jeremy ParrishCollected By: Jeremy Parrish / Brian DavisSampling Agency: FDEP NE ROC

WIN ID / Field ID:



G2NE1156

Smith lake Center

Latitude

☐ dd

Longitude

☐ dms☐ dd☐ dms

L

WIN ID/Field ID:



20030454

Ross Lake Center

Latitude

☐ dd

Longitude

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Location

Field ID

WIN/STORET #

Latitude

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Longitude

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Location

Field ID

WIN/STORET #

Latitude

☐ dd

Longitude

☐ dms☐ dd☐ dms

Relinquished By:

Date/Time

Shipping Method

Number of Coolers Shipped:

Received By:

Date/Time

Jeremy Parrish10/31/19Fedex12 teams & 2 separate chain of custodys for RQ

☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10/31/19</u> Time <u>1235</u>	Eastern Central	Composite end Date Time	Bottle Group(s) (See pg 2)
Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>		Diss. Oxygen <u>4.35</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)
Temp (C) <u>26.4</u>	pH <u>4.90</u>	Sample Depth <u>0.3</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>27.7</u>
Salinity (ppt) <u>0.01</u>		Comments		
☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10/31/19</u> Time <u>1010</u>	Eastern Central	Composite end Date Time	Bottle Group(s)
Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>		Diss. Oxygen <u>4.9</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)
Temp (C) <u>26.1</u>	pH <u>4.53</u>	Sample Depth <u>0.3</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>70.9</u>
Salinity (ppt)		Comments		
☐ Comp ☐ Grab	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		
☐ Comp ☐ Grab	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		

Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS						
Group: B	Bottle Type:	BP-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						

Group: B	Bottle Type:	P-500ML	# of Bottles: 4	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3					
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					

Group: B	Bottle Type:	P-125ML	# of Bottles: 4	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F					