

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: PLO DSS

RQ: 2019-05-20-11

Project: Melrose Lakes

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 _____

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.	Brian Davis	5/21/19	754	23.1	756.1	8.5	8.57	100	-	-	P/F	L/F
ICV			755	23.1	756.1	8.5	8.58	100.2	-	-	P/F	L/F
CCV	AKelmbacher	5-21-19	1540	24.0	755	8.4	8.44	100.0			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.	Brian Davis	5/21/19	757	190430A	4/6/20	1000	998	P/F	L/F
ICV			759	190319B	3/20	100	103.4	P/F	L/F
CCV	AKelmbacher	5-21-19	1543	190430A	5/20/20	1,000	999	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.	Brian Davis	5/21/19	805	2811E61	11/20	7.0	24.1	7.01	-51.7	P/F	L/F
Calibr.			808	2901A40	1/21	4.0	24.0	4.0	126.5	P/F	L/F
Calibr.			811	2901B51	1/2/20	10.01	24.3	10.01	-25.5	P/F	L/F
ICV			813	2811E61	11/20	7.0	24.2	7.05	-52.7	P/F	L/F
CCV	AKelmbacher	5-21-19	1545	2901A40	1/21	4.0	23.9	4.14	117.8	P/F	L/F
CCV			1548	2901B51	7/20/20	10.0	24.2	10.11	-232.2	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	Brian Davis	5/21/19	815	0.00	0.00	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:

Duplicate

Time Zone: EST CEN		Time: _____		Field ID: _____	
(WIN ID_DUP)					
WIN DMT Activity ID: _____					
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			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ < 2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice		Place Preservative Sticker(s) Here (If Available)	
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			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E3821-MS ☐ W-E3821-DI	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-E3821-DI ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-E-3821-MS ☐ W-CARB-AA	☐ Ice			

Blank

Time Zone: EST CEN		Time: _____		Field ID: _____	
(Blank Type_DDMMYYYY)					
DI Source: _____		Location: _____			
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipment ID: _____			
WIN DMT Blank Batch ID: _____					
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			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ < 2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice		Place Label Here	
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-F / W-TSS / TURBIDITY	☐ Ice			
Tracers	☐ W-E3821-MS ☐ W-E3821-DI	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-E3821-DI ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-E3821-MS ☐ W-CARB-AA	☐ Other			
Notes:					
Signature: _____			Date: _____		

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)

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: LAKE SUGGS CTR

Date: 5/21/2019

(mm/dd/yyyy)

WIN/ Field ID: 20030922

WBID: 2582

Latitude: 29.6881

(Decimal Degrees)

County: Putnam

ORG ID: 21FLA

Longitude: 82.0169

(Decimal Degrees)

Receiving Body of Water: Long Lake Drain

RQ-2019- 05-20-11

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
The Brian Davis							X					☒ Sample Container	☐ Van Dorn	☐ Pole	
Amy Kalmbacher						X		X				☐ Carboy	☐ Syringe		
												☐ Dipper	☐ Other		
												Depth Measured with <u>ruler</u>			
												Equipment ID <u>Ortho Kit 44</u>			
											Collection Method				
											☐ Wading	☒ Canoe/Kayak			
											☐ From Shore	☐ Electric Motor			
											☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded						Motor ID# <u>YSI Pro DSS</u>			Matrix: Fresh / Marine / DI						
Photos: Yes / <u>No</u>		Flow: No Flow / Intestinal / Flowing <u>NA</u>				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	1235	1.0	0.3	0.6	4.28	55	4.68	0.03	64.1	29.3					
CEN			1.4		0.16	1.9	4.76	0.03	63.0	24.2					
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 ☒ H2SO4	<u>518344070</u>	<u>12/2019</u>	☒ <2						
Metals	☒ W-ICPMS ☒ W-ICP					☒ Ice ☒ HNO3	<u>NA9091030</u>	<u>9/2020</u>	☒ <2						
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter					☒ Ice	<u>RTBA86875</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 ☐ WE8321-MS ☐ W-CARB-AA					☐ Ice									
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C					☐ Ice									

Contains: 1:1 HNO3
Lot No.: NA9091030
Expires: 04/09/20
See Safety Data Sheet (SDS)

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Contains: 1:1 HNO3
Lot No.: NA9091030
Expires: 04/09/20
See Safety Data Sheet (SDS)

Contains: 1:1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Notes:

WIN ID/Field ID:



20030922

Lake Suggs Ctr

Signature: A. Kalmbacher

Date: 5-21-2019

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID in LIMS DMT: MC 5/22/2019 QC Station ID, Field Parameters in LIMS DMT: _____

Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data in WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Melrose Lakes

Customer: NE-DIST

Requester: Jeremy M. ParrishField Report Prepared By: A. Kalmbacher

Project ID: SMP

Collected By: B. DavisSampling Agency: FDEP/NE ROC

WIN ID/Field ID:  20030980		☐ Comp ☒ Grab		Collection (comp begin or grab) Date <u>5-21-2019</u> Time <u>1140</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2) <u>B</u>	
Goose Lake		Matrix (type, e.g., Salt, <u>Fresh</u> , etc)		Diss. Oxygen <u>5.03</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms		Temp (C) <u>28.3</u> pH <u>4.67</u>		Sample Depth <u>0.3</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>55.3</u>		
		Salinity (ppt) <u>0.02</u>		Comments				
WIN ID/Field ID:  G2NE1130		☐ Comp ☒ Grab		Collection (comp begin or grab) Date <u>5-21-2019</u> Time <u>1020</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) <u>B</u>	
Lake Rosa Center		Matrix (type, e.g., Salt, <u>Fresh</u> , etc)		Diss. Oxygen <u>AK 7.84</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms		Temp (C) <u>29.1</u> pH <u>7.28</u>		Sample Depth <u>0.3</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>63.1</u>		
		Salinity (ppt) <u>0.03</u>		Comments				
WIN ID/Field ID:  20030922		☐ Comp ☒ Grab		Collection (comp begin or grab) Date <u>5-21-2019</u> Time <u>1235</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) <u>A</u>	
Lake Suggs Ctr		Matrix (type, e.g., Salt, <u>Fresh</u> , etc)		Diss. Oxygen <u>4.28</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms		Temp (C) <u>29.3</u> pH <u>4.68</u>		Sample Depth <u>0.3</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>64.1</u>		
		Salinity (ppt) <u>0.03</u>		Comments				
WIN ID/Field ID:  20030454		☐ Comp ☐ Grab		Collection (comp begin or grab) Date _____ Time _____	☐ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s)	
Ross Lake Center		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms		Temp (C)		pH	Sample Depth	☐ ft ☐ m		Sp. Conductance (umho/cm)
		Salinity (ppt)		Comments <u>DID NOT SAMPLE</u>				

Relinquished By: <u>A. Kalmbacher</u>	Date/Time: <u>5-21-2019</u>	Shipping Method: <u>Fed Ex 1530</u>	Number of Coolers Shipped: <u>1</u>	Received By: _____	Date/Time: _____
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Group: A	Bottle Type:	P-1L	# of Bottles: 2	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: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP						
	W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	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: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	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: B	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	CHLSUITE-W						

Group: B	Bottle Type:	P-500ML	# of Bottles: 2	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	<u>2</u>
	W-NH3					
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					

Group: B	Bottle Type:	P-125ML	# of Bottles: 2	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	<u>2</u>
	W-PO4-F					