

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: PRODS

RQ: 2019-05-20-12

Project: LVI Badly

2019-06-10-20 lake como

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 6/2019

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.	J. Parnish	6/18/19	725	23.8	757.7	8.4	8.4	99.7	—	—	P/F	L/F
ICV	J	6/18/19	726	23.8	757.7	8.4	8.42	99.7	—	—	P/F	L/F
CCV	C. Ruben	↓	756	23.4	756	8.5	8.52	100.2	—	—	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.	J. Parnish	6/18/19	727	190430A	5/20	1000	1000	P/F	L/F
ICV	J	6/18/19	728	147430	12/19	147	152	P/F	L/F
CCV	C. Ruben	↓	1510	190430A	5/20	1000	1000	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.	J. Parnish	6/18/19	730	2811561	11/20	7.00	23.8	701	54.9	P/F	L/F
Calibr.	J	6/18/19	731	2904600	3/21	4.00	24.6	3.98	125.9	P/F	L/F
Calibr.	J	6/18/19	735	2901851	7/20	10.00	24.5	18.81	227.2	P/F	L/F
ICV	J	6/18/19	737	2904300	3/21	4.00	24.5	4.06	121.6	P/F	L/F
CCV	C. Ruben	6/18/19	530	2811001	11/20	7.00	24.4	7.13	54.2	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 ± 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	J. Parnish	6/18/19	738	0.00	0.02	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: Lake Como Center Date: 6/18/19
(mm/dd/yyyy)
WIN/ Field ID: 20030627 WBID: 2892A Latitude: 29.4696
(Decimal Degrees)
County: Palm ORG ID: 21FLA Longitude: 81.5828
(Decimal Degrees)
Receiving Body of Water: _____ RQ- 2019-06-10-20

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Karnish						X		X	X
C. Ruben					X		X		

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 / <u>Normal</u> / High / Flooded					Meter ID# <u>PROSS</u>					Matrix: <u>Fresh</u> / Marine / DI	
Photos: Yes ☒ No ☐		Flow: No Flow / Intertidal / Flowing / NA			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 (µmhos/cm)	Temp. (C°)	
EST	1045	5.109	0.3	5	6.97	90.7%	5.93	0.04	79.5	29.1	
CEN			3.7	5	3.21	41%	5.64	0.04	81.3	28.6	

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	☒ CHLSP/TE-W					☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CH-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: Vegetation covered bottom

Place Label Here

Signature: Jeremy Parnish Date: 6/18/19

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 _____ Migrate Data to WIN: _____ Verify Data in WIN: _____

(Initials/Date) (Initials/Date) (Initials/Date)

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: NE-DIST

Requester: Jeremy M. Parrish

Field Report Prepared By: _____

Project ID: SMP

Collected By: _____

Sampling Agency: _____

Location <i>Lake Como Center</i>		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>6/18/19</i> Time <i>1045</i>	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2) <i>A</i>	
Field ID		Matrix (type, e.g., Salt, Fresh, etc) <i>Fresh</i>	Diss. Oxygen <i>6.97</i>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET # <i>20030 627</i>		Temp (C) <i>29.1</i>	pH <i>5.93</i>	Sample Depth <i>0.3</i>	☐ ft ☒ m		Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) <i>0.04</i>	Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m		Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m		Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m		Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m		Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
------------------	-----------	-----------------	----------------------------	--------------	-----------

Group: A	Bottle Type:	P-1L	# of Bottles: 3	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: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	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: 3	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	0
	W-ICP						
	W-ICPMS						
Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	0
	W-NH3						
	W-NO2NO3						

Group: B Bottle Type: P-500ML # of Bottles: 1 Preservative: ICE And H2SO4 Enter Number of Bottles Sent to Lab 0

W-S-A-TP
W-TKN
W-TOC

Group: B Bottle Type: P-125ML # of Bottles: 1 Preservative: FILTER-ICE Enter Number of Bottles Sent to Lab 0

W-PO4-F