



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes No

PH

WIN Station Name: Lake Arrowhead at boat dock at Turtle Crk Ln near outlet

Date: 2/6/19

WIN/ Field ID: G1WA0004

WBID: 564A

Latitude: 30.568517

(mm/dd/yyyy)

County: LEON

ORG ID: 21FLWQA

Longitude: -84.218058

(Decimal Degrees)

Receiving Body of Water: Pine Hill Lake

RQ- 2019-02-04-38

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment					
Jason Storrs							☒ Sample Container	☐ Van Dorn	☐ Pole			
Avril Wood-McGrath							☐ Carboy	☒ Syringe				
							☐ Dipper	☐ Other				
							Depth Measured with <u>YSI</u>					
							Equipment ID <u>Bio1099 #2</u>					
							Collection Method					
							☐ Wading	☐ Canoe/Kayak				
							☐ From Shore	☐ Electric Motor				
							☒ Other <u>DOCK</u>	☐ Gasoline Motor				
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded							Meter ID# <u>Bio1099 #2</u>		Matrix: <u>Fres</u> / Marine / DI			
Photos: Yes / <u>No</u>		Flow: <u>No Flow</u> / Intestinal / 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 (umhos/cm)	Temp. (C°)		
EST	9:25	1.2	<u>0.3 AUM</u> <u>2.6-19</u> <u>0.8-0.3</u>		<u>10.63</u> <u>AUM 2.6-19</u> <u>113-0 11-27</u>	<u>112.5</u>	<u>6.38</u>	<u>0.03</u>	<u>74</u>	<u>15.55</u>		
CEN	9:23		<u>0.8</u>	<u>0.9</u>	<u>10.63</u>	<u>105.5</u>	<u>6.10</u>	<u>0.03</u>	<u>74</u>	<u>14.26</u>		
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>8101020</u>	<u>4/11/19</u>	☒ <2				
Metals	☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3			☐ <2				
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter				☒ Ice	<u>10827054</u>						
Chlorophyll	☒ CHLSUITE-W				☒ Ice							
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-S04-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: Sunny 70's light haze in air pollen on waters surface SE wind 5 mph							WIN ID/Field ID Lake Arrowhead at Boat Dock At Turtle Crk Ln Near Outlet <u>G1WA0004</u>					
Signature: <u>Avril Wood-McGrath</u>							Date: <u>2/6/19</u>					

LIMS EVENT ID: WAS-5FCT-2019-02-06-01

WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: BAW 2/6/19

QC Station ID, Field Parameters In LIMS DMT: AUM 2/8/19

Scan/Save Field Sheets (Initials/Date)

Migrate Data to WIN: (Initials/Date)

Verify Data In WIN: (Initials/Date)

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

~~Boldly "X" this box if there is qualified data on this name~~

Meter ID: Biology#2

RQ- 2019-02-04-38

Project: SMD

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.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site _____

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Jason Storrs	2/6/19	8:30	19.56	9.165	9.17	100	99.2	—	P/F	L/F
ICV				19.55	9.165	9.17	99.9	100.2	—	P/F	L/F
CCV	Jason Storrs	2/6/19	3:20	20.41	9.021	8.92	99.2	99.2	—	P/F	L/F
CCV										P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

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.	Jason Storrs	2/6/19	8:20	1805F01	5/2020	100	100	P/F	L/F
ICV				180221A	3/2019	500	476	P/F	L/F
CCV	Jason Storrs	2/6/19	3:20	1805F01	5/2020	100	104	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	April Wood-McGrath	2/6/19	7:45	180403C	10/2019	7.0	7.0	-72.4	P/F	L/F
Calibr.				180621D	7/2019	4.0	4.0	—	P/F	L/F
Calibr.				180621F	1/2020	10.0	10.0	-183.0	P/F	L/F
ICV				180621F	1/2020	10.0	9.98	-182.0	P/F	L/F
CCV	Jason Storrs	2/6/19	3:20	180621D	7/2019	4.0	3.72		P/F	L/F
CCV				180403C	10/2019	7.0	6.77	Alum 2.6.17	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)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth 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	Jason Storrs	2/6/19	8:15	0.00	0.000	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:

had difficulty w/ calibrating against 1000 μ S standard & verifying against 100 μ S standard. used 500 standard instead.

See attached sheet. verified pH meter against

Form effective October 1, 2017

4.0 standard and result 8.76

Group: A	Bottle Type:	P-1L	# of Bottles: 5	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: A	Bottle Type:	BP-1L	# of Bottles: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	CHLSUITE-W					

Group: A	Bottle Type:	P-500ML	# of Bottles: 5	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3					
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					

H2SO4 Lot # SA8101020

Group: A	Bottle Type:	P-125ML	# of Bottles: 5	Preservative:	FILTER+ICE	Enter Number of Bottles Sent to Lab
	W-PO4-F					

Field Filtered w/ 0.45 um filter Lot # 10827054

Date of Request: 15-JAN-2019
 Created By: MUSSON_C On: 15-JAN-2019
 Modified By: JASROTIA_P On: 16-JAN-2019
 Customer: WAS-SECT
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District:
 Sampling Event: Tallahassee Lakes

Send Coolers To:

Phone: 850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Program Module Number:
 Priority: 3
 Event Status: S
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 16-JAN-2019
 Biology Request Reviewed By: JASROTIA_P On: 16-JAN-2019
 Sampling Kit Required: YES Ship on: 31-JAN-2019
 Sampling Kit Shipped: YES On: 30-JAN-2019
 Sampling Kit Packed By: BOWDEN_M
 Preservatives Needed: NO
 Date to Receive Samples: 04-FEB-2019
 Received By:

Send Final Report To:

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Report Type: Final Only

FTP Data: NO

QC Report: YES

Date Log: NO

Authorization Log: NO

Comments: Group A: Nutrients x5
 WBIDs: 546A, 546B, 564A, 564B, 647A

Packing Notes:
 No FedEx Labels
 No Trash Bags

Bottle Group A (Water) With 5 Samples:

Bottle Type: P-1L	Number of Bottles: 5	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO ₃ /L
Total Alkalinity		
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
Turbidity		
W-CL-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Chloride in aqueous matrices
Chloride		
W-COLOR	Template: DEFAULT	(SM 2120 B) True Color measured at 450 nm
Color (true)		
W-F	Template: DEFAULT	(SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
Fluoride		
W-SO4-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
Sulfate		
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
TDS		
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample
TSS		
Bottle Type: BP-1L	Number of Bottles: 5	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Chlorophyll-a, Corrected		
Chlorophyll-a, Uncorrected		

Cooler Packing Worksheet for Request: RQ-2019-02-04-38

Tallahassee Lakes

Ship Cooler On: 1/31/2019

Customer/Project: WAS-SECT/SMP

Assigned To: BOWDEN_M

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Please return
packing list with
sample submittal
forms.

Comments:

No preservatives needed.

Group A: Nutrients x5

WBIDs: 546A, 546B, 564A, 564B, 647A

Packing Notes:

No FedEx Labels

No Trash Bags

Requested Analyses:

Bottle Group: A

of Sites: 5

Container ID: P-1L

Qty: 5

Preservation: ICE

Lot #

00073319

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

W-TDS

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L

Turbidity in aqueous matrices

Chloride in aqueous matrices

True Color measured at 450 nm

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 5

Preservation: ICE

Lot #

1241507

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: P-500ML

Qty: 5 Preservation: ICE And H2SO4

Lot # 00072433

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH3
W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

Description

Ammonia in aqueous matrices as mg N/L
Nitrite/Nitrate in aqueous matrices as mg N/L
Total Phosphorus in aqueous matrices as mg P/L
Total Kjeldahl Nitrogen in aqueous matrices
Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML

Qty: 5 Preservation: FILTER-ICE

Lot # 00072954

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Cooler Packed By: AGB

Number of Coolers: 2

Date: 1/30/19

Kit must also include:

☒ Field Sheets
☒ Temperature Control Bottle
☒ FedEx Bills, if applicable
☒ Plastic Bags/Zip Ties
☒ Acid Labels (sets of 24)

If Preservation Included:

ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2019-02-04-38