



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

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

Date: 07/10/2019

(mm/dd/yyyy)

WIN ID/ Field ID: G1WA0004

WBID: 564A

Latitude: 30.568517

(Decimal Degrees)

County: Leon

ORG ID: 21FLWQA

Longitude: -84.218058

(Decimal Degrees)

Receiving Body of Water: Pine Hill Lake

RQ - 2019-07-08-19

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection	Sampling Equipment		
Blake Spencer			X	X	X	X	X	X	☒ Sample Container	☐ Van Dorn	☐ Pole
Will Lasley			X	X	X	X	X	X	☐ Carboy	☒ Syringe	
									☐ Dipper	☐ Other	
Water Level: Dry/ Pooled/ Low/ <u>Normal</u> / High/ Flooded									Depth Measured with: <u>KSI ProASS</u>		
Meter ID# <u>ProASS 18T104543</u>									Equipment ID		
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 <u>NA</u> Low <u>NA</u>											

Field Sample

(Bracket Sample Time)

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	1203	1.3	0.3	0.8	9.91	134.6	6.8 6.6	0.04 0.03	79.5	31.5
CEN			0.1							

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	SA 8344070	12/10/19	☒ <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-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-E3821-MS ☐ W-E32821-DI	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-E3821-MS ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-E3821-DI ☐ W-CAR8-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Contains 1.1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Place Preservation (If A)

Contains 1.1 H2SO4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

Duplicate

Field ID G1WA0004_DUP

Blank

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

[illegible][illegible]

Request Number: RA-2019-07-08-19
Tallahassee Lakes

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WAS-SECT
Project ID: SMP

Requester: Curtis Musson
Collected By: Blake Spencer & Will Lasley

Field Report Prepared By: Blake Spencer
Sampling Agency: FIED

Location	WIN ID / FILED ID	Collection (comp begin or grab)	Time	Temp (C)	pH	Salinity (ppt)	Comments	Sample Depth	Diss. Oxygen	Diss. Oxygen	Sp. Conductance	Total Res. Chlorine	Bottle Group(s)
Field ID	WIN ID / FILED ID G1WA0043	☒ Comp ☐ Grab	Date 7/10/19	0847	68.9	6.4		0.3	53.5	53.5	72	---	A
WIN/STORET #	Location Lake Tom John Middle												
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms										
Location	WIN ID / FILED ID G1WA0041	☒ Comp ☐ Grab	Date 7/10/19	1005	43.9	6.7		0.3	93.9	93.9	91	---	A
Field ID	WIN ID / FILED ID G1WA0041												
WIN/STORET #	Location Upper Dianne Lake Middle												
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms										
Location	WIN ID / FILED ID G1WA0040	☒ Comp ☐ Grab	Date 7/10/19	1055	21.1	7.0		6.5	112.1	112.1	90	---	A
Field ID	WIN ID / FILED ID G1WA0040												
WIN/STORET #	Location Lower Dianne Lake Middle												
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms										
Location	WIN ID / FILED ID G1WA0054	☒ Comp ☐ Grab	Date 7/10/19	1137	8.4	0.08		0.3	53.5	53.5	54	---	A
Field ID	WIN ID / FILED ID G1WA0054												
WIN/STORET #	Location Pine Hill Lake Middle												
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms										

Relinquished By:	Date/Time 7/10/19 1403	Shipping Method Hand Delivered	Number of Coolers Shipped: 2	Received By: SR	Date/Time 7-10-19 2:02
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Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WAS-SECT

Requester: Curtis Musson

Field Report Prepared By: Blake Spencer

Project ID: SMP

Collected By: Blake Spencer & Will Lasley

Sampling Agency: FAEF

Location	WIN ID / FILED ID	Collection (comp begin or grab)	Temp (C)	pH	Salinity (ppt)	Comments	Sample Depth	Diss. Oxygen	Eastern Composite end	Central Composite end	Time	Bottle Group(s)
Field ID	G1WA0004	Matrix (type, e.g., Salt, Fresh, etc)										(See pg 2)
WIN/STORET #	Location Lake Arrowhead at boat dock at Turtle Crk Ln near outlet	Temp	31.5	6.8	0.04	Fresh	0.3	134.6	mg/L	% sat	80	A
Latitude	dd dms	Longitude	dd dms	Salinity (ppt)	0.04	Comments						
Location	WIN ID G1WA0004	Collection (comp begin or grab)	Temp	pH	Salinity	Comments	Sample Depth	Diss. Oxygen	Eastern Composite end	Central Composite end	Time	Bottle Group(s)
Field ID	Location Lake Arrowhead at boat dock at Turtle Crk Ln near outlet	Temp										C
WIN/STORET #	Field ID G1WA0004_DUP	Collection (comp begin or grab)	Temp	pH	Salinity	Comments	Sample Depth	Diss. Oxygen	Eastern Composite end	Central Composite end	Time	Bottle Group(s)
Latitude	dd dms	Longitude	dd dms	Salinity (ppt)		Field Duplicate						
Location	Location Lake Arrowhead at boat dock at Turtle Crk Ln near outlet	Temp										
Field ID	Location	Temp										
WIN/STORET #	Field ID FB_07102019	Collection (comp begin or grab)	Temp	pH	Salinity	Comments	Sample Depth	Diss. Oxygen	Eastern Composite end	Central Composite end	Time	Bottle Group(s)
Latitude	dd dms	Longitude	dd dms	Salinity (ppt)		Field Blank						B
Location	Location	Temp										
Field ID	Location	Temp										
WIN/STORET #	Field ID	Collection (comp begin or grab)	Temp	pH	Salinity	Comments	Sample Depth	Diss. Oxygen	Eastern Composite end	Central Composite end	Time	Bottle Group(s)
Latitude	dd dms	Longitude	dd dms	Salinity (ppt)								

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
	7/10/19 1402	Hand Delivered	2	SR	7/10/19 2:08

Group: A	Bottle Type:	P-1L	# of Bottles: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab	5
	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	5
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 5	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	5
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 5	Preservative:	FILTER+ICE	Enter Number of Bottles Sent to Lab	5
	W-PO4-F						
Group: B	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: B	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: B	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						

Group: B	Bottle Type: W-TKN W-TOC	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1
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	1
Group: C	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
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	1
Group: C	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1

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: Pro DSS 145104543

RQ- 2019-07-08

Project: 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 _____

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.	Blake Spencer	7/10/19	0719	20.9	755.6	8.9	8.88	99.5	—	—	P/F	L/F
ICV	Blake Spencer	7/10/19	0720	21.0	755.7	8.9	8.70	100.0	—	—	P/F	L/F
CCV	Blake Spencer	7/10/19	1341	26.3	755.1	8.01	8.28	102.7	—	—	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Blake Spencer	7/10/19	0724	190618F	06/2020	1000	1000	P/F	L/F
ICV	Blake Spencer	7/10/19	0725	190618F	06/2020	1000	998	P/F	L/F
CCV	Blake Spencer	7/10/19	1345	2808884	7/2020	100	101.5	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.	Blake Spencer	7/10/19	0728	190621F	01/2020	7.01	22.2	7.01	-39.9	P/F	L/F
Calibr.	Blake Spencer	7/10/19	0730	190405B	10/2020	4.00	22.1	4.00	146.6	P/F	L/F
Calibr.	Blake Spencer	7/10/19	0733	190621F	01/2020	10.03	22.2	10.03	106.6	P/F	L/F
ICV	Blake Spencer	7/10/19	0735	190621F	01/2020	10.03	22.2	10.03	199.2	P/F	L/F
CCV	Blake Spencer	7/10/19	1450	190405B	10/2020	4.00	23.6	4.05	143.5	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 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	Blake Spencer	7/10/19	0737	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:

Cooler Packing Worksheet for Request: RQ-2019-07-08-19

Tallahassee Lakes

Ship Cooler On: 7/5/2019

Customer/Project: WAS-SECT/SMP

Assigned To: REYNOLDS_T

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Nutrients x5

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

Group B: Nutrient QC Blank

Group C: Nutrient QC DUP

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 # 00073852

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 # 1248230

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 # 00073854

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 # 00073850

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: B

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00073852

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: 1 Preservation: ICE

Lot # 1248230

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00073854

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: 1 Preservation: FILTER-ICE

Lot # 00073850

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: C

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00073852

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: 1 Preservation: ICE

Lot # 1248230

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00073854

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: 1 Preservation: FILTER-ICE

Lot # 00073850

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By: Tyler Reynolds

Number of Coolers: 2

Date: 07/01/19

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-2019-07-08-19