



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 1

Data Qualified?

Yes / No

Do
PH

Location/STORET Station Name: Lake Arrowhead at boat dock at Turtle Crk Ln near outlet

Date: 11/01/2017

(mm/dd/yyyy)

STORET # G1WA0004

WBID: 564A

Latitude: 30.568517

County: Leon

RQ - 2017-10-30-16

ORG ID: 21FLWQA

Longitude: -84.218058

(Decimal Degrees)

Receiving Body of Water: Pine Hill Lake

Field ID: G1WA0004_11012017

(Decimal Degrees)

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Jhamieka Greenwood						
Curtis Musson						

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Equipment ID		

Collection Method	
☐ Wading	☐ Via Boat
☒ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☐ Electric Motor
	☐ Gasoline Motor

Water Level: Dry / Pooled / Low / Normal / High / Flooded						Matrix: Fresh / Marine / DI											
Meter ID# BIO 2						Photos: Yes / No						Tide Falling: Yes / No / NA					
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (umhos/cm)	Temp. (C°)							
EST	8:56	0.3	1.2	10.07	104	9.06	0.03	0.4	65	16.98							
CEN																	

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other

SBIO ID Numbers: SBIO-ID: RPS-ID: Macrophyte-ID: LIMS#: 1941958

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA7233030	8/21/18	☒ <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-CL-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R	☐ Ice			
	☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice			
		☐ Other			

Contains 1:1 Sulfuric Acid
Lot No.: SA7233030
Expires: 08/21/18
See Safety Data Sheet (SDS)

THORNDYKE SCIENTIFIC
320 NORTH MAIN STREET
LEON, FL 32304
1-800-658-2711

Contains 1:1 Sulfuric Acid
Lot No.: SA7233030
Expires: 08/21/18
See Safety Data Sheet (SDS)

May damage. Do not breathe fumes. Avoid contact with skin and eyes. If contact occurs, flush with water for 15 minutes. If inhaled, move to fresh air. If swallowed, do not induce vomiting. Seek medical attention. See Safety Data Sheet (SDS) for more information.

SA7233030

8/21/18

See Safety Data Sheet (SDS)

SA7233030

8/21/18

See Safety Data Sheet (SDS)

SA7233030

8/21/18

See Safety Data Sheet (SDS)

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See Safety Data Sheet (SDS)

SA7233030

8/21/18

See Safety Data Sheet (SDS)

SA7233030

8/21/18

See Safety Data Sheet (SDS)

Notes: Kit A

Field ID: → Lake Arrowhead at boat dock at Turtle Crk Ln near outlet
Now 1, 2017



G1WA0004_11012017

Lake Arrowhead at Boat Dock At Turtle Crk Ln Near Outlet

STORET ↓



G1WA0004

Signature:

Date:

Field Parameters Entered into LIMS: CM 11/06/17

(Initials/Date)

Field Parameters QC in LIMS: 11/1/17

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved: 4-13-18

(Initials/Date)

(Initials/Date)

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

Holdly "X" this box if there is qualified data on this page.

Meter ID: Bio #2 RQ: 2017-10-30-16 Project: Snp

- 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.	Curtis Mussen	703	11/1/17	20.55	9.074	9.00	100.0	Sc	—	P/F	L/F
ICV	Curtis Mussen	704	11/1/17	20.54	9.074	9.00	100.0	Sc	—	P/F	L/F
CCV	Curtis Mussen	1611	11/1/17	21.63	8.812	8.43	96.0	49	—	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; 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.	Curtis Mussen	705	11/1/17	17100SD	10/2018	1000	1000	P/F	L/F
ICV	Curtis Mussen	706	11/1/17	17100SD	10/2018	1000	1000	P/F	L/F
CCV	Curtis Mussen	1614	11/1/17	17100SE	10/2018	100	100	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.	Curtis Mussen	11/1/17	708	120614B	2/2018	7.0	7.0	45	P/F	L/F
Calibr.	Curtis Mussen	11/1/17	710	12100SA	10/2018	4.0	4.01	213	P/F	L/F
Calibr.	Curtis Mussen	11/1/17	711	120310C	9/2018	10.01	9.97	-11	P/F	L/F
ICV	Curtis Mussen	11/1/17	713	120210C	9/2018	10.01	9.92	704	P/F	L/F
CCV	Curtis Mussen	11/1/17	1616	120614B	12/2018	7.0	6.56	73	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)

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	Curtis Mussen	11/1/17	707	0.000	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:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Lab Sample Submittal Form

Request Number: RQ-2017-10-30-16

Salem, Arrowhead, AJ, Megginis, Swamp, Godby
Customer: WAS-SECT
Project ID: SMP

Requester: Curtis Musson

Collected By: Curtis Musson

Field Report Prepared By: Jamiele Greenwood
Sampling Agency: FDEP

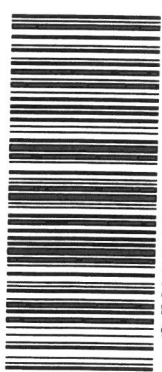
Page 1 of 1

Aj Henry Park
Pond Middle

Field ID →

Aj Henry Park
Pond Middle

Nov 01, 2017



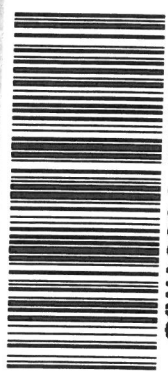
GIWA0058_11012017

Lake Arrowhead at
Boat Dock At Turtle
Crk Ln Near Outlet

Field ID →

Lake Arrowhead
at boat dock at
Turtle Crk Ln
near outlet

Nov 1, 2017



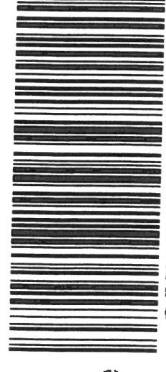
GIWA0004_11012017

Tallavanna
Lake Middle

Field ID →

Tallavanna
Lake Middle

Nov 1, 2017



GIWA0045_11012017

Collection (comp begin or grab)		Collection (comp begin or grab)		Collection (comp begin or grab)	
Comp	Date	Comp	Date	Comp	Date
☒ Grab	11/1/17	☒ Grab	11/1/17	☒ Grab	11/1/17
Matrix (Salt, Fresh)		Matrix (Salt, Fresh)		Matrix (Salt, Fresh)	
Fresh		Fresh		Fresh	
Temp (C)	10.30	Temp (C)	10.07	Temp (C)	9.43
Diss. Oxygen (mg/L)	9.34	Diss. Oxygen (mg/L)	9.06	Diss. Oxygen (mg/L)	9.55
pH	6.3	pH	6.3	pH	6.3
Salinity (ppt)	0.03	Salinity (ppt)	0.03	Salinity (ppt)	0.12
Comments		Comments		Comments	
Latitude (Decimal Degrees)	30.508	Latitude (Decimal Degrees)	30.568517	Latitude (Decimal Degrees)	30.59862
Longitude (Decimal Degrees)	-84.216	Longitude (Decimal Degrees)	-84.218058	Longitude (Decimal Degrees)	-84.46593
Sample Depts (m)	0.3	Sample Depts (m)	0.3	Sample Depts (m)	0.3
Sp. Conductance (umho/cm)	70	Sp. Conductance (umho/cm)	65	Sp. Conductance (umho/cm)	255
Bottle Group(s)	A	Bottle Group(s)	A	Bottle Group(s)	A/B/C F

Relinquished By:	Date/Time: 11/1/17 14:48
Received By:	Date/Time: 11-1-17 14:48

Field Report Prepared By: _____

Sampling Agency: FDEP

Collected By:

Swamp Creek upstream of Railroad

STRETCH →



G1WA0052

Field 11 Swamp Creek
upstream of
Railroad

Nov 1, 2017

**Salem Branch
downstream of
SR 159**

STORET →



G1WA0053

Field ID: ↑

Salem Branch
downstream of
SR 159

Nov 1, 2017

Harbinwood Estates Drain

STREET →



G1WA0034

Field ID Harbinwood
Estates Drain

Nov 01, 2017

Relinquished By:

Date/Time

Number of Coolers

Received By:

Date/Time 11/17/2018

☐ Comp ☒ Grab		Collection (comp begin or grab) Date Time		Collection (comp begin or grab) Date Time		Bottle Group(s)
Matrix (Salt, Fresh) Fresh		Diss. Oxygen (mg/L)	10.87			A/C/O E/G
Temp (C) 11.80		pH	6.54	Sample Depts (m)	0.3	
Salinity (ppt) 0.03		Comments		Sp. Conductance (umho/cm)	71	
Latitude (Decimal Degrees) 30.663				Longitude (Decimal Degrees) -84.448		
☐ Comp ☒ Grab		Collection (comp begin or grab) Date Time		Collection (comp begin or grab) Date Time		Bottle Group(s)
Matrix (Salt, Fresh) Fresh		Diss. Oxygen (mg/L)	8.69			C/O/G
Temp (C) 16.76		pH	8.09	Sample Depts (m)	0.2	
Salinity (ppt) 0.16		Comments		Sp. Conductance (umho/cm)	330	
Latitude (Decimal Degrees) 30.63082				Longitude (Decimal Degrees) -84.43155		
☐ Comp ☒ Grab		Collection (comp begin or grab) Date Time		Collection (comp begin or grab) Date Time		Bottle Group(s)
Matrix (Salt, Fresh) Fresh		Diss. Oxygen (mg/L)	7.45			A/B/C
Temp (C) 17.39		pH	7.42	Sample Depts (m)	0.05	
Salinity (ppt) 0.05		Comments		Sp. Conductance (umho/cm)	105	O/G
Latitude (Decimal Degrees) 30.5193				Longitude (Decimal Degrees) -84.3357		

RQ-2017-10-30-16

Salem, Arrowhead, AJ, Megginis, Swamp, Godby
Customer: WAS-SECT
Project ID: SMP

Requester: Curtis Musson

Field Report Prepared By: _____
Sampling Agency: FDEP

Page of

Collected By:

Lor

STREET →



G1WA0033

Megg nnis Arm Run

Downstream of Sharer

Field 1 () ↗



Megginnis Arm
Run Downstream
of Sharer

NOV 01, 2017

G1WA0033 11012017

STREET →



G1WA0061

Godby Drainage

Ditch at

Progress Dr.

Field 17 

Godby Drainage
Ditch at
Progress Cir.

Nov 01, 2017

G1WA0001 11012017

Central Drainage

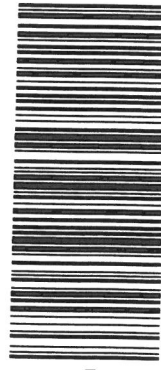
Ditch clownstream

of Orange Ave.

STORET 

G1WA0026

Field ()



Central Drainage
Ditch downstream
of Orange Ave.

NOV 01, 2017

G1W A0026 11012917

Relinquished By:

Date/Time

Number of Coolers

Received By:

Date/Time

Date/Time 11/18/2018

Group: A	Bottle Type:	P-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	8
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	8
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 8	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	8
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 8	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	8
	W-PO4-F						
Group: B	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	3
	W-ICP						
	W-ICPMS						
Group: C	Bottle Type:	P-250ML-WO-THI	# of Bottles: 7	Preservative:	ICE	Enter Number of Bottles Sent to Lab	7
	ECOLI-18QT						
Group: D	Bottle Type:	BG-1L	# of Bottles: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab	5
	W-AHERB-AA						
	W-SUC-AA-R						
	W-UHERB-AA						
Group: E	Bottle Type:	QPCR-P-250ML	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
	PCR-FILTER						
	PCR-HF183						
Group: F	Bottle Type:	BG-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
	W-AHERB-AA						

Group: F	Bottle Type: W-GLYPH W-PYR-AA-R W-SUC-AA-R W-UHERB-AA	BG-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
Group: F	Bottle Type: W-CT-Cl-R W-PCL-SQ-R	BG-500ML	# of Bottles: 6	Preservative:	ICE	Enter Number of Bottles Sent to Lab	6
Group: F	Bottle Type: W-PSNP-TQ	BG-1L	# of Bottles: 6	Preservative:	ICE	Enter Number of Bottles Sent to Lab	6
Group: G	Bottle Type: PCR-FILTER	QPCR-P-250ML	# of Bottles: 6	Preservative:	ICE	Enter Number of Bottles Sent to Lab	6

Container ID: BG-1L

Qty: 6 Preservation: ICE

Lot # 00069348

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-PSNP-TQ

Description

Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS

Bottle Group: G

of Sites: 3

Container ID: QPCR-P-250ML

Qty: 6 Preservation: ICE

Lot # 00068707

Description:

Analysis

PCR-FILTER

Description

Preparation of Samples by Filtration and held for qPCR Analysis

Cooler Packed By: Tyler R. Number of Coolers: 6 Date: 10/25/17

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☒ FedEx Bills, if applicable
- ☒ Plastic Bags
- ☒ Zip Ties

If Preservation Included:

ID <u>nitric acid</u>	Exp <u>09/18/18</u>	Lot # <u>7261120</u>
ID <u>sulfuric acid</u>	Exp <u>10/02/18</u>	Lot # <u>7275010</u>
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2017-10-30-16

Container ID: BP-1L

Qty: 8 Preservation: ICE

Lot # 120 8913

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 8 Preservation: ICE And H2SO4

Lot # 08069255

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: 8 Preservation: FILTER-ICE

Lot # 08068347

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: 3

Container ID: P-500ML

Qty: 3 Preservation: HNO3

Lot # 08069255

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-ICP
W-ICPMS

Description

Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

Bottle Group: C

of Sites: 7

Container ID: P-250ML-WO-THI

Qty: 7 Preservation: ICE

Lot # 117048

Description:

Analysis

Description