



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF 7

Data Qualified?
Yes ☒ No ☐

Location/STORET Station Name: Lake Killarney Mid

Date: 7/10/2017
(mm/dd/yyyy)

STORET #

WBID: 6475

Latitude: 30.53301

County: Leon

RQ - 2017-06-05-53

ORG ID: 21FLWQA

Longitude: -84.21477

Receiving Body of Water:

Field ID: Killarney - algal - sample

Sampling Team Members

Ben Ralys
Robert Wiwi

WQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

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# Biology #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 (µmhos/cm)	Temp. (C°)
EST	<u>12:50 RW</u> <u>11:50</u>	<u>0.3</u>	<u>1.45</u>	<u>12.57</u>	<u>1723</u>	<u>8.51</u>	<u>0.04</u>	<u>0.4</u>	<u>81</u>	<u>31.98</u>
CEN										

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

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

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	<u>7093010</u>	<u>4/3/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <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-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☒ ALGAE-ID <u>X2</u>	☒ 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 ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes:

Algal bloom response

Place Label Here
(If Available)

Signature: [Signature]

Date: 7/10/17

Field Parameters Entered into LIMS: DR 7/10/17
(Initials/Date)

Field Parameters QC in LIMS: RW 7/10/17
(Initials/Date)

Date Migrated to STORET: 7/10/17
(Initials/Date)

Field Sheets Scanned/Saved: DR 7/10/17
(Initials/Date)

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET

(7-6-06 V2)

WATERBODY NAME: Lake Killbuck		DATE (M/D/YY): 7/10/17	TIME: (AM) (PM) 12:50 PM 11:50	Case ID#:
COUNTY: Leon		LOCATION: Lake Killbuck Mid	NEAREST TOWN/CITY: Tallahassee	
Visit Type: Initial ☒ Recon ☒ Sampling ☒ Follow-up ☐	Samples collected: ☒ yes ☐ no	Samples submitted to: FDEP Lab - Tallahassee		Photos Taken: ☒ yes ☐ no
Sample collection method: Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐				
Sample & Analysis types: Aqueous: ☒ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐ Algal ID & enumeration: ☒ Nutrients: ☒ Chl-a: ☒ AGP: ☐ Turbidity: ☒ Toxin: ☐				
Estimated size of bloom: entire lake		Impounded: ☒ yes ☐ no		
Lake/Estuary Typical depth: 1.45 m deep		Inflows: ☒ yes ☐ no Outflows: ☒ yes ☐ no		
Stream/River/Canal: m wide		Typical Transect: m deep m deep m deep m/s m/s m/s Left bank Middle Right bank		

Canopy Cover: Open: ☒ Lightly Shaded (11-45%): ☐ Moderately Shaded (46-80%): ☐ Heavily Shaded: ☐			
Description of Bloom/		Latitude Degrees Minutes Seconds 30.53301 (DD)	Longitude Degrees Minutes Seconds -84.21471 (DD)
Present Weather conditions: Overcast, thunderstorms (following sampling)			
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)			
Sketch bloom area on the attached map. Indicate wind direction.			
Last rain event: Immediately after sampling 7/11/17		Rainfall amount: 0.10 in	

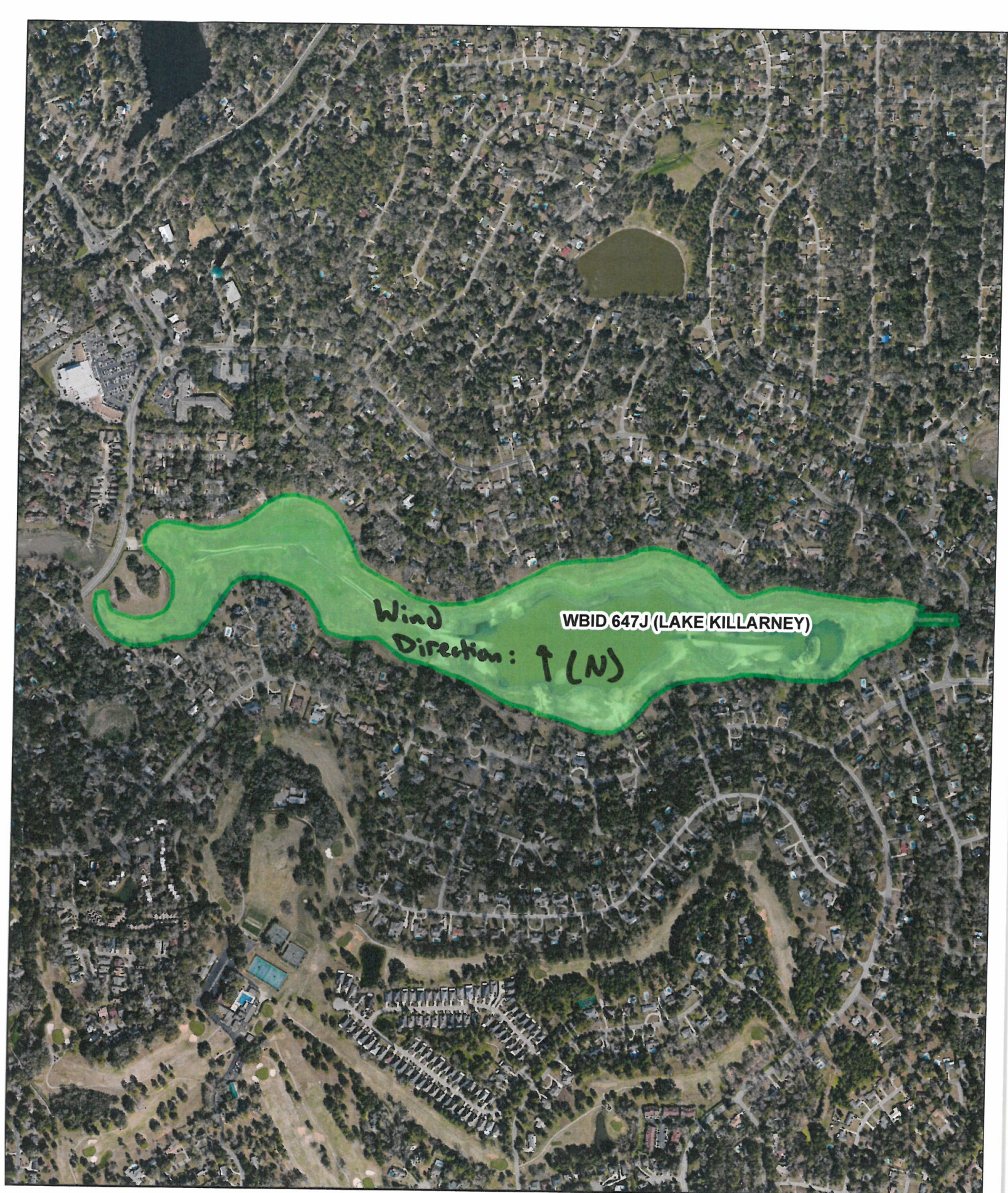
WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	DOSAT	Salinity (ppt)	Secchi (m)
Top	0.3	31.98	8.51	12.57	81	172.3	0.04	0.4
Mid-depth								
Bottom								
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order) 5th - 6th order 7th order or greater) Lake: ☒ Wetland: ☐ Estuary: ☐ Other: ☐								
Water Odors (check box): Normal: ☐ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Other: ☒ Fertilizer/rotting organic material								
Water Surface (check box): Clear: ☐ Scum: ☐ Glob: ☒ (minimal) Slick: ☐								
Water Clarity (check box): Clear: ☐ Slightly: ☐ Turbid: ☒ Opaque: ☐								
Bloom Color (check box): Green: ☒ Red: ☐ Brown: ☐ Other: ☐								
Notes: Alternanthera philoxeroides, Hydrilla verticillata, Eichornia crassipes abundant in mats					Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☒ ☐ Fish ☐ ☒ ☐ ☐ Aquatic Macrophytes ☐ ☐ ☐ ☒ Iron/sulfur Bacteria ☒ ☐ ☐ ☐			

VISIT TEAM:

Robert Wini, Ben Ralys

AGENCY:

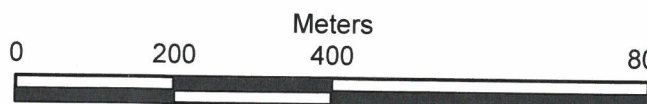
FDEP



Legend



Estimated area affected by algal bloom



Customer: WQAP

Project ID: BLOOM-RESP

Requester: Curtis Musson

Collected By:

Field Report Prepared By:

Sampling Agency:

1

1

1

[illegible]

~~Relinquished By~~

Date/Time

Shipping Method

Number of Coolers Shipped:

Received By

Date/Time

7/10/17 16:05

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 Biology #2

RQ- 2017-06-05-53

Project Algal Bloom

- Notes:** (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (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 03/06/2017

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.	Ben Ratys R. Wini	7/10/17	10:33	22.10	8.727	8.72	99.9	42.0	—	P	Lab
ICV	Ben Ratys R. Wini	7/10/17	10:34	22.14	8.727	8.70	99.8	42.0	—	P	Lab
CCV	Ben Ratys ↓	7/10/17	15:39	25.03	8.263	8.25	99.8	43.1	—	P	Lab
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Ben Ratys R. Wini	7/10/17	10:36	170310D	3/18	1000	1000	P	Lab
ICV	Ben Ratys R. Wini	7/10/17	10:37	170310D	3/18	1000	1000	P	Lab
CCV	Ben Ratys ↓	7/10/17	15:33	170310E	3/18	100	102	P	Lab
CCV									

Report specific conductance as a whole number with no decimal figure.

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.	Ben Ratys R. Wini	7/10/17	10:39	170310B	9/18	7.0	7.00	-4.2	P	Lab
Calibr.	Ben Ratys	7/10/17	10:41	170510A	3/18	4.0	4.00	168.3	P	Lab
Calibr.	Ben Ratys	7/10/17	10:43	161111C	5/18	10.0	9.96	-16.57	P	Lab
ICV	Ben Ratys ↓	7/10/17	10:44	170310A	3/18	4.0	3.86	174.8	P	Lab
CCV	Ben Ratys ↓	7/10/17	15:34	161111C	5/18	10.0	10.00	-168.1	P	Lab
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 50;

Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification _____

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

Cooler Packing Worksheet for Request: RQ-2017-06-12-30

Algal Bloom response - As Needed

Ship Cooler On: 6/2/2017

Customer/Project: WQAP/BLOOM-RESP

Assigned To: SEARSON_C

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd
MS #3525
Tallahassee, FL 32399-2400
Attn: Curtis Musson

Comments:

No preservatives needed.

Please print two copies of algal job labels at login.

Analyze toxin upon receipt after consultation with Biology's Taxonomy Manager.

Bottle Groups A/B - separate event, priority 1

Bottle Groups C/D - separate event, C - priority 3, D - priority 12

Bottle group A - Priority 1

For algal dominant taxon.

Bottle Group B - Priority 1

For toxin testing

Bottle Group C - Priority 3

Water quality testing

Bottle group D - Priority 12

For algal full ID

There are multiple bottles per Group in case multiple sample targets or sample locations are needed. Samplers use best professional judgment to decide which samples are appropriate to collect for a particular response. All sets of bottles do not have to be filled at one time.

Packing Note:

No FedEx labels needed

Requested Analyses:

Bottle Group: A

of Sites: 8

Container ID: PT-50ML

Qty: 8 Preservation: ICE

Lot # 03715003

Description: Plastic Tube 50 mL

Analysis

BLOOM-ID

Description

Assessment of dominant algal taxa in bloom or mat sample

DTY-QN-C

No. of diatom taxa of quantitative phytoplankton sample.

PKD-QN-C

No. of wet taxa of quantitative phytoplankton sample.

Cooler Packed By: CS Number of Coolers: 1 Date: 6-2-17

Kit must also include:

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

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2017-06-12-30