FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified? (Yes) / No — pH

WIN Station Name: Lake Monkey Business Middle **Date:** 5/9/2018 (mm/dd/yyyy)

WIN/ Field ID: G1WA0036 **WBID:** 546C **Latitude:** 30.60779 (Decimal Degrees)

County: Leon **ORG ID:** 21FLWQA **Longitude:** 84.23076 (Decimal Degrees)

Receiving Body of Water: Lake Iamonia **RQ-2018-** 05-07-33

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson		X		X	X
Jason Storrs	X		X		

Sampling Equipment
- [x] Sample Container ☐ Van Dorn ☐ Pole
- ☐ Carboy [x] Syringe
- ☐ Dipper ☐ Other
- Depth Measured with: YSI
- Equipment ID: Biology 2

Collection Method
- ☐ Wading [x] Canoe/Kayak
- ☐ From Shore [x] Electric Motor
- ☐ Other ☐ Gasoline Motor

Water Level: Dry/ Pooled/ Low / (Normal) / High / Flooded **Meter ID#** Biology #2 **Matrix:** (Fresh) / Marine / DI

Photos: (Yes) / No **Flow:** No Flow / Intestital / Flowing / NA **Tide:** Rising/ Falling/ Slack/ (NA) **Tide Times:** High NA Low NA

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTh)	Sp COND (μmhos/cm)	Temp. (C°)
(EST)	1225	1.9	0.3	1.1	8.32	107.5	7.47	0.04	82	28.63
CEN	1223		1.4		8.44	107.5	7.52	0.04	82	27.78

Biological Samples Collected: ~~(None)~~ (HA) SCI RPS Algae ID LVS (LVI) Other: 1991575

SBIO ID Numbers: SBIO-ID: 78379 HA-ID: 15128 RPS-ID: Macrophyte-ID: 10909 LIMS#: ~~1991566~~ CM

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4	SA7341020	12/7/18	[x] <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 μm Filter	[x] Ice	10827054		
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	[x] E Coli ☐ F Coli ☐ Enterococci	[x] Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Place Preserva... (If A...

Contains: 1:1 H2S04
Lot No.: SA7341020
Expires: 12/07/18
See Safety Data Sheet (SDS)

THERMO FISHER SCIENTIFIC, 520 NORTH MAIN STREET, MIAMI, OK 74354, 1-828-658-2711. Contains: 1:1 H2SO4. SULFURIC ACID <51%. DANGER. May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fume/mist/vapours. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Store in corrosive resistant container with a resistant inner liner.

Notes:
A-Kit
FW Bacteria, pictures
LVI performed
photos

Lake Monkey Business Middle — WIN ID/Field ID G1WA0036

Signature: **Date:** 5/9/18

Enter Field Parameters, Verify Station ID In LIMS DMT: [initials] 5/10/18 (Initials/Date) QC Station ID, Field Parameters In LIMS DMT: CM 5-14-18 (Initials/Date)

Scan/Save Field Sheets ________ (Initials/Date) Migrate Data to WIN: ________ (Initials/Date) Verify Data In WIN: ________ (Initials/Date)

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Monday Business

Date: 5-9-18

SPECIES	1	4	7	10	Collected? (√)
Myriophyllum aquaticum					
*Myriophyllum heterophyllum					
*Myriophyllum laxum					
*Myriophyllum pinnatum					
Myriophyllum spicatum					
*Najas filifolia					
*Najas guadalupensis					
*Najas minor					
Nelumbo lutea					
Nitella spp.					
Nuphar sp.					
Nymphaea odorata					
Nymphoides aquatica					
Nyssa sylvatica var. biflora					
Orontium aquaticum					
Osmunda cinnamomea					
Osmunda regalis					
Panicum hemitomon		X	X	X	
Panicum repens		C			
Paspalidium geminatum					
*Paspalum repens					
Paspalum urvillei					
Peltandra sp.					
Persea sp.	X				
Pennisetum purpureum					
Phragmites australis					
Pinus elliottii			X	X	
Pistia stratioides					
Pluchea sp.					
*Polygonum glabrum (densiflorum)					
*Polygonum hydropiperoides					
*Polygonum punctatum					
*Polygonum					
Pontederia cordata					
*Potamogeton diversifolius	X	X	X		
*Potamogeton illinoensis					
*Potamogeton pusillus					
*Potamogeton pectinatus (Stuckenia pectinatus)					
Proserpinaca pectinata					
*Rhexia					
*Rhynchospora corniculata					
*Rhynchospora inundata					
Rhynochospora tracyi					
Ricciocarpus natans					
Sabal palmetto					
Sacciolepis striata	X	X	C	X	
*Sagittaria filiformis					
*Sagittaria graminea					
*Sagittaria isoetiformis					
Sagittaria lancifolia	X	X	X	X	
Sagittaria latifolia					

SPECIES	1	4	7	10	Collected? (√)
Salix caroliniana					
Salvinia minima					
Sambucus canadensis					
Sapium sebiferum	X	X	X	X	
Saururus cernuus	X	C	X	X	
Schinus terebinthifolius					
*Schoenoplectus californicus					
*Schoenoplectus pungens					
*Schoenoplectus tabernaemontani (Scirpus validus)					
Scirpus cubensis (Oxycaryon cubense)					
Scirpus cyperinus					
*Sesbania					
Solidago sp.					
Sparganium americanum					
Spartina bakeri					
Spirodela polyrhiza					
Taxodium sp.				X	
Thalia geniculata					
Thelypteris palustris					
Triadenum virginicum					
Typha sp.					
Urochloa mutica (Brachiaria mutica)					
*Utricularia gibba (U. biflora)					
*Utricularia floridana					
*Utricularia foliosa					
*Utricularia inflata					
*Utricularia purpurea					
*Utricularia cornuta					
*Utricularia radiata					
Vallisneria americana					
*Websteria confervoides					
Wedelia trilobata (Sphagneticola trilobata)					
Wolffiella spp.					
Woodwardia virginica					
Xyris sp.					
Zizania aquatica					
Zizaniopsis milacea					
Bay tree (unknown)	X				
purple IRIS (IRIS SP)	X				
Carex sp.	X	X	X	X	

Entered by: Blake [signature] 5/10/18

SBIO: 78379
Macrophyte: 10909

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Munkell Basins	County: Leon	Date: 5/9/18
Analyst: Sbers / Mulson	Signature: [signature]	STORET: GLW4036

Except where noted as "sp." species level identification required. *Genera that may require lab verification*
Plants in bold= FLEPPC invasive exotic.

It is important to note dominant or co-dominant taxa (by areal extent) for each unit. Use "D" to denote dominant taxon, or "C" for the 2 co-dominant taxa.

Lake units sampled (circle one group): (1, 4, 7, 10) [circled] 2, 5, 8, 11 3, 6, 9, 12

SPECIES	1	4	7	10	Collected? (√)
Acer rubrum		X			
Alternanthera philoxeroides	X	X	X	X	
Andropogon sp.	X	X			
Azolla filiculoides (A. caroliniana)					
Baccharis sp.					
Bacopa caroliniana	X	X	X	X	
Bacopa monnieri					
Bidens laevis					
Bidens mitis					
Blechnum serrulatum					
Boehmeria cylindrica	X	X	X		
Brasenia schreberi					
Cabomba caroliniana					
Casuarina equisitifolia					
Centella asiatica					
Cephalanthus occidentalis	X			X	
Ceratophyllum demersum					
Chara sp.					
Cladium jamaicense					
Cliftonia monophylla					
Colocasia esculenta					
*Commelina sp	X				
Crinum americanum					
***Cyperus alternifolius** (C. involucratus)		X			
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus			X		
*Cyperus surinamensis					
Cyrilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Egeria densa					
Eichhornia crassipes					
*Eleocharis baldwinii	X	X	X	X	
*Eleocharis ______					
Eleocharis cellulosa					
Eleocharis equisetoides					
Eleocharis interstincta					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium					
*Fuirena ______					
Fuirena scirpoidea					
Gordonia lasianthus					

SPECIES	1	4	7	10	Collected? (√)
Habenaria repens					
Hydrilla verticillata					
Hydrocotyle sp.	X	X	X	X	
Hrdrolea quadrivalis					
Hygrophila polysperma					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Iris pseudacorus		X	X		
Itea virginica					
Juncus effusus	X	X	X	X	
*Juncus marginatus		X	X	X	
*Juncus megacephalus					
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliniana					
Leersia hexandra					
Landoltia punctata (Spirodela punctata)					
Lemna sp.					
Leucothoe racemosa (Eubotrys racemosa)					
Limnobium spongia					
Limnophila sessiliflora					
Liquidamber styraciflua	X	X		D X	
*Ludwigia arcuata					
*Ludwigia leptocarpa					
*Ludwigia linearis					
*Ludwigia octovalvis					
***Ludwigia peruviana**					
*Ludwigia repens			X	X	
*Ludwigia ______					
Luziola fluitans (Hydrochloa carolinensis)					
Lycopus virginicus					
Lyonia lucida					
Magnolia virginiana					
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum	X		X	X	
Mikania scandens					
Mimosa pigra					
Myrica cerifera D →	D	X	X	X	
~~Liquid Amber~~	X	X		(circled)	CM
~~Saurus sarnus (lizard tail)~~		X			CM
~~Cyperus umbelatus~~		X			CM
Saw palm (Seranoah repens)		X			

Macrophyte QC Report

STORET: G1WA0036
Visit ID: 78379
Macrophyte ID: 10909
LIMS ID: 1991575

Sample Date: 5/9/2018
Collector Name: Musson, Curtis
Identifier Name: Musson, Curtis

Macrophyte Sample Comments:

QC, CM 5-14-19

Taxa Name:	Rep 1	Rep 2	Rep 3	Rep 4	
Acer rubrum		P			CM
Alternanthera philoxeroides	P	P	P	P	CM
Andropogon	P	P			CM
Bacopa caroliniana	P	P	P	P	CM
Boehmeria cylindrica	P	P	P		CM
Carex	P	P	P	P	CM
Cephalanthus occidentalis	P			P	CM
Commelina	P				CM
Cyperus alternifolius		P			CM
Cyperus odoratus			P		CM
Eleocharis baldwinii	P	P	P	P	CM
Hydrocotyle	P	P	P	P	CM
Iris	P				CM
Iris pseudacorus		P	P		CM
Juncus effusus	P	P	P	P	CM
Juncus marginatus		P	P	P	CM
Liquidambar styraciflua	P	P		D	CM
Ludwigia repens			P	P	CM
Micranthemum umbrosum	P		P	P	CM
Myrica cerifera	D	P	P	P	CM
Panicum hemitomon			P	P	CM
Panicum repens		C			CM
Persea	P				CM
Pinus elliottii			P	P	CM
Potamogeton diversifolius	P	P	P		CM
Sacciolepis striata	P	P	D	P	CM
Sagittaria lancifolia	P	P	P	P	CM
Sapium sebiferum	P	P	P	P	CM
Saururus cernuus	P	C	P	P	CM
Serenoa repens		P			CM
Taxodium				P	CM

This data has not been fully approved at this time.

Tallahassee Hills, Valdosta Lime Sink

Entered by: Blake G 5/10/18

QC: CM 5-14-19

SBIO: 78379 HA: 15128

DEP Form FD 9000-6: Lake Habitat Assessment Field Sheet

STORET STATION NUMBER: GIW400036	DATE (M/D/Y): 5/9/18	LAKE NAME: Lake Monkey Business	FIELD ID / NAME: GIW400036
ECO-REGION:	COUNTY: Leon	SAMPLING LOCATION/DESCRIPTION: Lake Monkey Business Middle	LAKE SIZE: 90 Acres

PARAMETER				
HYDROLOGY	No surface inflow or outflow present, very long water residence time, groundwater seepage dominates ☐	Surface water inflow present, but flow is rare, moderate to long water residence time ☐	Surface water inflow and outflow present (or outflow only), sometimes with visible flow, short water residence time ☐	Impounded, hydrology of system artificially controlled ☒
Color	Very clear, uncolored water (benthic sampling appropriate) ☐	Water somewhat tannin stained (benthic sampling appropriate) ☐	Dark, discolored water (water color 20 PCU or higher) ☒	Visibility extremely reduced due to high color ☐

	Optimal					Suboptimal					Marginal					Poor				
Secchi 11	Secchi >3 m		Secchi(m)			3	2.6	2.2	1.8	(1.4)	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1
	Or VOB	20	19	18	17	16	15	14	13	12	(11)	10	9	8	7	6	5	4	3	2	1
Vegetation Quality 12	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa					Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants					Large masses (21%- 40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats					Lake choked (>40%) with nuisance macrophytes (duck-weed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed)				
	20	19	18	17	16	15	14	13	(12)	11	10	9	8	7	6	5	4	3	2	1
Stormwater Inputs 4	Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation					Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place					Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place					Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	(4)	3	2	1
Bottom Substrate Quality 9	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present					Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present					Moderate layer of CPOM/ mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom					Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom				
	20	19	18	17	16	15	14	13	12	11	10	(9)	8	7	6	5	4	3	2	1
Lakeside Adverse Human Alternations 8	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%)					Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected					Many structures, roads or other human disturbance visible (50%-70%) lakeside affected)					Highly developed or disturbed (>70% of lakeside affected)				
	20	19	18	17	16	15	14	13	12	11	10	9	(8)	7	6	5	4	3	2	1
Upland Buffer Zone 4	Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer					89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer					50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer					< 29% of shoreline with >18m buffer				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	(4)	3	2	1
Adverse Watershed Land Use 9	Score the potential effects from adverse human land uses, based on a continuum of amount and type, with least to most adverse as follows: Native vegetation, Silviculture, Pasture or Citrus, Low Density Residential, Row Crops, Commercial, High Density Residential, Urban, Industrial																			
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

TOTAL SCORE: 57	COMMENTS: Grass Carp, Macrophytes only along the Shore
ANALYSIS DATE: 5-9-18	ANALYST: Curtis Musson / Jason Sterns
SIGNATURE:	

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 76379 | MACROPHYTE ID: | LATITUDE: 30.60774
COUNTY: Leon | STORET #: GIW400036 | LONGITUDE: -84.23076
DATE: 5/9/18 | TIME: 1225 EST | SAMPLING AGENCY: FDEP
SITE NAME: Lake Monkey Business Middle | WBID: 546C
FIELD ID/NAME: GIW400036 | LAKE SIZE: 90 Acres | RQ: 2018-05-07-33

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS): Residuals

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
29	17	0.2	0.4	49	0.9	1.3	2

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: 4.5 — Land Use Source & Year:

Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy
Artificially Impounded ☒ Yes ☐ No

	Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation	Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place	Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place	Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place
STORMWATER INPUTS: 9	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
LAKESIDE ALTERATIONS: 8	Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected)	Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected)	Many structures, roads or other human disturbance visible (50%-70% lakeside affected)	Highly developed or disturbed (>70% of lakeside affected)
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
BUFFER ZONE: 4	Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer	89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer	50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer	< 29% of shoreline with >18m buffer
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water:
Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☒ pH<2 ☐ No
Color Sample Taken? ☒ Yes ☐ No Lot # 547341020 Exp. Date: 12/7/18
Alkalinity Sample Taken? ☒ Yes ☐ No
Water Level ☐ Low ☒ Normal ☐ High

Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other
Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other

Meter Readings:

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.3	28.63	7.47	8.32	107.5	82	0.04
Mid-Depth:							
Bottom:	1.4	27.78	7.52	8.44	107.5	82	0.04

Meter ID: Biology 2

Clarity: ☐ Clear ☒ Opaque ☐ Turbid ☐ Slightly Turbid
Color: ☐ Clear ☐ Tannic ☒ Green
SECCHI (M): 1.1 VOB ☐
Total Station Depth (M): 1.9

Sediment Type: (may check more than one) Sample Taken? ☐ Yes ☒ No
☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated
☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify):

Sediment Odors: ☒ Normal ☐ Other (Specify): ☐ Anaerobic

Biological Communities:
LVI Conducted? ☒ Yes ☐ No
Phytoplankton Sample Taken? ☐ Yes ☒ No
Sample Preserved? NA ☐ Yes ☐ No
Lot #: NA Exp Date: NA
Algal Bloom/Algal ID Sample Taken? Yes (No)
Active Vegetation Mgmt? ☒ Yes ☐ No ☐ Don't Know

Abundance:

	Absent	Rare	Common	Abundant
Periphyton	☐	☐	☒	☐
Nuisance Plants	☐	☐	☒	☐
Submersed Plants	☒	☐	☐	☐
Exotic Apple Snails	☒	☐	☐	☐

Additional Notes: Active Vegetation Management, Grass Carp. Macrophytes limited to the shear line

Weather Conditions: Clear Sunny 80's

SAMPLING TEAM: Curtis Musson / Jason Stoltz | **SIGNATURE:** | **DATE:** 5-9-18


Lake Monkey Business
5-9-18
Curtis Mulson
Sections 1, 4, 7, 10
Jason Storey
GLW400736
12 30.3084, -84,2337
1
2 30.6085, -84.2298
3
3 30.6075, -84.2295
4
11
11 30.6065, -84.2333
6
5 30.6067, -84.2278
6 30.6065, -84.2302
5
10
9
7
8 30.6046, -84.2341
9 30.6043, -84.2363
8
0
0.04
0.08
0.16 Miles
FREAC

Killarn Lakes

pH

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

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

Meter ID: Bio #2 RQ- 2018-05-07-33 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.

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 Musson	5/9/18	706	21.60	8.812	8.81	100.0	43	–	P / F	L / F
ICV	Curtis Musson	5/9/18	707	21.60	8.812	8.81	100.0	43	–	P / F	L / F
CCV	Jason Skerrs	5/9/18	1420	22.85	8.611	8.69	100.8	44.1	–	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	5/9/18	710	17100SD	10/2018	1000	1000	P / F	L / F
ICV	Curtis Musson	5/9/18	711	17100SD	10/2018	1000	1000	P / F	L / F
CCV	Jason Skerrs	5/9/18	1405	180326A	04/2019	100	101	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	5/9/18	713	17100SB	04/2019	7.0	7.00	2.3	P / F	L / F
Calibr.	Curtis Musson	5/9/18	715	17100SA	10/2018	4.01	4.01	176	P / F	L / F
Calibr.	Curtis Musson	5/9/18	718	17100SC	04/2019	10.01	10.00	-163	P / F	L / F
ICV	Curtis Musson	5/9/18	720	17100SA	10/2018	4.01	3.99	178	P / F	L / F
CCV	Jason Skerrs	5/9/18	1407	17100SL	04/2019	10.0	8.46	-75.6	P / F	L / F
CCV	Jason Skerrs	5/9/18	1409	17100SB	04/2019	7.0	5.76	77.2	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)

1415
5/9/18

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 Musson	5/9/18	712	0.00	0.00	P / F	L / F

CCV
0.006m

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

Form effective October 1, 2017

Request Number: RQ-2018-05-07-33

NE Tallahassee Lakes

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WAS-SECT

Project ID: SMP

Requester: Curtis Musson

Collected By: Jason Stelter, Curtis Musson

Field Report Prepared By: Curtis Musson

Sampling Agency: FDEP

Location: Pine Hill Lake Middle

Field ID / WIN/STORET #: WIN ID/Field ID G1WA0054

Latitude: ☒ dd ☐ dms | Longitude: ☒ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 5-9-18 Time 915 Eastern / Central | Composite end Date — Time —

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen 108.8 ☐ mg/L ☒ % sat | Total Res. Chlorine (mg/L) —

Temp (C) 27.13 | pH 6.95 | Sample Depth 0.3 ☐ ft ☒ m | Sp. Conductance (umho/cm) 47

Salinity (ppt) | Comments LVI

Bottle Group(s) (See pg 2): A

Location: Petty Gulf lake Middle

Field ID / WIN/STORET #: WIN ID/Field ID G1WA0022

Latitude: ☒ dd ☐ dms | Longitude: ☒ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 5-9-18 Time 935 Eastern / Central | Composite end Date — Time —

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen 112.6 ☐ mg/L ☒ % sat | Total Res. Chlorine (mg/L) —

Temp (C) 27.19 | pH 7.53 | Sample Depth 0.3 ☐ ft ☒ m | Sp. Conductance (umho/cm) 60

Salinity (ppt) 0.03 | Comments

Bottle Group(s): A

Location: Lower Dianne Lake Middle

Field ID / WIN/STORET #: WIN ID/Field ID G1WA0040

Latitude: ☒ dd ☐ dms | Longitude: ☒ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 5-9-18 Time 1020 Eastern / Central | Composite end Date — Time —

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen 119.2 ☐ mg/L ☒ % sat | Total Res. Chlorine (mg/L) —

Temp (C) 27.60 | pH 8.29 | Sample Depth 0.3 ☐ ft ☒ m | Sp. Conductance (umho/cm) 92

Salinity (ppt) 0.04 | Comments

Bottle Group(s): A

Location: Upper Dianne Lake Middle

Field ID / WIN/STORET #: WIN ID/Field ID G1WA0041

Latitude: ☒ dd ☐ dms | Longitude: ☒ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 5.9.18 Time 1105 Eastern / Central | Composite end Date — Time —

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen 139.5 ☐ mg/L ☒ % sat | Total Res. Chlorine (mg/L) —

Temp (C) 27.95 | pH 9.39 | Sample Depth 0.3 ☐ ft ☒ m | Sp. Conductance (umho/cm) 102

Salinity (ppt) 0.05 | Comments

Bottle Group(s): A

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Curtis Musson	5-9-18 / 1346	Drop off	2		5/9/18 1350

Request Number: RQ-2018-05-07-33
NE Tallahassee Lakes

Customer: WAS-SECT
Project ID: SMP

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Page 1 of 2
last revised Jan 25, 2018

Requester: Curtis Musson
Collected By: Jason Storrs, Curtis Musson
Field Report Prepared By: Curtis Musson
Sampling Agency: FDEP

Location
Field ID: **Lake Monkey Business Middle**
WIN/STORET #
WIN ID/Field ID: G1WA0036
Latitude ☒ dd ☐ dms
Longitude ☒ dd ☐ dms
☐ Comp ☒ Grab
Collection (comp begin or [✓ grab]) Date 5-9-18 Time 1225 [✓ Eastern] Central
Composite end Date — Time —
Matrix (type, e.g., Salt, [✓ Fresh], etc) Fresh
Diss. Oxygen 107.5 ☐ mg/L ☒ % sat
Total Res. Chlorine (mg/L) —
Temp (C) 28.63
pH 7.47
Sample Depth 0.3 ☐ ft ☒ m
Sp. Conductance (umho/cm) 82
Salinity (ppt) 0.04
Comments
Bottle Group(s) (See pg 2) A

Location
Field ID
WIN/STORET #
Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
☐ Comp ☐ Grab
Collection (comp begin or grab) Date Time Eastern Central
Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc)
Diss. Oxygen ☐ mg/L ☐ % sat
Total Res. Chlorine (mg/L)
Temp (C)
pH
Sample Depth ☐ ft ☐ m
Sp. Conductance (umho/cm)
Salinity (ppt)
Comments
Bottle Group(s) ~~A~~ BR

Location
Field ID
WIN/STORET #
Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
☐ Comp ☐ Grab
Collection (comp begin or grab) Date Time Eastern Central
Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc)
Diss. Oxygen ☐ mg/L ☐ % sat
Total Res. Chlorine (mg/L)
Temp (C)
pH
Sample Depth ☐ ft ☐ m
Sp. Conductance (umho/cm)
Salinity (ppt)
Comments
Bottle Group(s) ~~A~~ BR

Location
Field ID
WIN/STORET #
Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
☐ Comp ☐ Grab
Collection (comp begin or grab) Date Time Eastern Central
Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc)
Diss. Oxygen ☐ mg/L ☐ % sat
Total Res. Chlorine (mg/L)
Temp (C)
pH
Sample Depth ☐ ft ☐ m
Sp. Conductance (umho/cm)
Salinity (ppt)
Comments
Bottle Group(s) ~~A~~ BR

Relinquished By: Curtis Musson	Date/Time 5-9-18 / 1346	Shipping Method DROPOFF	Number of Coolers Shipped: 2	Received By:	Date/Time 5/9/18 1350

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-250ML-WO-THI	# of Bottles: 5	Preservative:	ICE	Enter Number of Bottles Sent to Lab 5
	ECOLI-18QT					

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					

↑ lot SA7341020
exp. 12/07/2018

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

RQ-2018-05-07-33

Date of Request: 03-APR-2018
Created By: MUSSON_C On: 03-APR-2018
Modified By: MUSSON_C On: 03-APR-2018
Customer: WAS-SECT
Project: SMP
Division: Division of Environmental Assessment and Restoration
District:
Sampling Event: NE Tallahassee Lakes

Send Coolers To:

Phone: 850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399
Attn: Curtis Musson

Send Final Report To:

2600 Blair Stone Rd

Tallahassee, FL 32399
Attn: Curtis Musson

Program Module Number:
Priority: 3
Event Status: P
Criminal Investigation: NO
Chemistry Request Reviewed By:
Biology Request Reviewed By:
Sampling Kit Required: NO Ship on:
Sampling Kit Shipped:
Sampling Kit Packed By:
Preservatives Needed: NO
Date to Receive Samples: 09-MAY-2018
Received By:

Report Type: Final Only
FTP Data: NO
QC Report: YES
Date Log: NO
Authorization Log: NO

Comments: Group A: Freshwater Kit, E. coli x 5

Packing Notes:
Labels only, we have bottles

Bottle Group A (Water) With 5 Samples:

Bottle Type:	Number of Bottles:	Preserved With:
ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L
Total Alkalinity		
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Chlorophyll-a, Corrected		
Chlorophyll-a, Uncorrected		
Phaeophytin-a		
ECOLI-18QT	Template: DEFAULT	(SM 9223 Quanti-Tray) Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems
Escherichia Coli-Quanti-Tray		
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-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
Ammonia-N		
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
NO2NO3-N		
W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L
O-Phosphate-P		

Bottle Group A (Water) With 5 Samples:

Bottle Type:	Number of Bottles:	Preserved With:
W-S-A-TP Total-P	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-SO4-IC Sulfate	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
W-TKN Kjeldahl Nitrogen	Template: DEFAULT	(EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC Organic Carbon	Template: DEFAULT	(SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices
W-TSS TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices