

LVI

Site Name Lake Jew Sample Date 5/9/18

WBID 2837A WIN ID G1CE0081 RQ 2018-05-07-60

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	KWM MAY 18 2018	JK 6/21/18
Create SBIO station visit	KWM MAY 21 2018	n/a
Vascular Entry (add LIMS ID)	KWM MAY 21 2018	LB 6/12/18
Lake Observation Sheet Entry	KWM MAY 21 2018	LB 6/12/18
Authorize SBIO data	LD 6/12/18	n/a
Scan all sheets to 21FLCEN folder		n/a
LIMS/WIN migration		n/a
File in cabinet		n/a

Comments/notes:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes ☒ No ☐

WIN Station Name: Lake Jem @ Center

Date: 5/9/18
(mm/dd/yyyy)

WIN/ Field ID: G1CE0081

WBID: 2837A

Latitude: 28.74670701
(Decimal Degrees)

County: Lake

ORG ID: 21 FL CEN

Longitude: -81.66456989
(Decimal Degrees)

Receiving Body of Water: _____

RQ-2018- 05-07-60

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
<u>Leif Bomang</u> <u>Katie March</u>					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole		
										☐ Carboy	☒ Syringe			
										☐ Dipper	☐ Other			
					Depth Measured with <u>[Secchi Disk Line]</u> / Meter									
					Equipment ID <u>[KNOTHEAD (67) / LEADPOOT (NON)]</u>									
										Collection Method				
					☐ Wading		☐ Canoe/Kayak							
					☐ From Shore		☒ Electric Motor							
					☐ Other		☐ Gasoline Motor							
Water Level: Dry/ Pooled/ Low/ <u>Normal</u> / High / Flooded										Meter ID# <u>Bathy 67</u>		Matrix: <u>Fresh</u> Marine/ DI		
Photos: <u>Yes</u> / No		Flow: No Flow / Intestinal / Flowing / <u>NA</u>		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 (µmhos/cm)	Temp. (C°)				
<u>EST</u>	<u>1126</u>	<u>6.4</u>	<u>0.3</u>	<u>2.3</u>	<u>9.25</u>	<u>116.4</u>	<u>8.06</u>	<u>0.14</u>	<u>293</u>	<u>27.08</u>				
<u>CEN</u>			<u>5.9</u>		<u>0.74</u>	<u>8.5</u>	<u>6.38</u>	<u>0.14</u>	<u>298</u>	<u>22.14</u>				
Biological Samples Collected: None HA SCI RPS Algae ID LVS <u>LVI</u> Other:														
SBIO ID Numbers: SBIO-ID: <u>78404</u> HA-ID: <u>15154</u> RPS-ID: <u>W/A</u> Macrophyte-ID: <u>0934</u> LIMS#: <u>1991830</u>														
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>SA7275010</u>	<u>10/2/18</u>	☒ <2				
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3				☐ <2				
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice		<u>13615055</u>						
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-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-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				☐ Ice								
		☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R				☐ Other								

Notes:

WIN ID / Field ID →

Lake Jem @ Center
(2837A)



G1CE0081

Signature: K March

Date: 5/9/18

Enter Field Parameters, Verify Station ID In LIMS DMT:

KWM MAY 18 2018

QC Station ID, Field Parameters In LIMS DMT:

21 6/21/18

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: Lake STORET #: GICE0081 LONGITUDE: _____
 DATE: 5/9/18 TIME: _____ SAMPLING AGENCY: _____
 SITE NAME: Lake Jem WBID: 2837A
 FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: 2018-05-07-01

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>10</u> Silviculture _____ Field/Pasture <u>205</u> Agricultural <u>205</u> Residential <u>40</u> Commercial _____ Industrial _____ Other (Specify) _____					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: _____ Land Use Source & Year: _____																
Local Watershed Erosion (select one) : ☒ None ☐ Slight ☐ Moderate ☐ Heavy					Artificially Impounded ☐ Yes ☒ No																
Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy																					
STORMWATER INPUTS <u>3</u>		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
LAKESIDE ALTERATIONS <u>3</u>		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 <u>3</u>		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 ☐ No pH < 2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # _____ Exp. Date: _____ 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: Top: <u>0.3</u> <u>27.08</u> <u>8.06</u> <u>9.25</u> <u>116.4</u> <u>293</u> <u>0.14</u> Mid-Depth: _____ Bottom: <u>5.9</u> <u>22.14</u> <u>6.38</u> <u>0.74</u> <u>8.5</u> <u>298</u> <u>0.14</u>						Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green					
Meter ID: <u>Belly 67</u>						SECCHI (M) <u>2.3</u> Total Station Depth (M) <u>6.4</u> VOB _____					
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____					
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot #: _____ Exp Date: _____ 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 ☒ ☐ ☐ ☐					
Weather Conditions: <u>Sunny</u>						Additional Notes:					
SAMPLING TEAM: <u>LOB, KWM</u>						SIGNATURE: <u>Kmarch</u>					
						DATE: <u>5/9/18</u>					

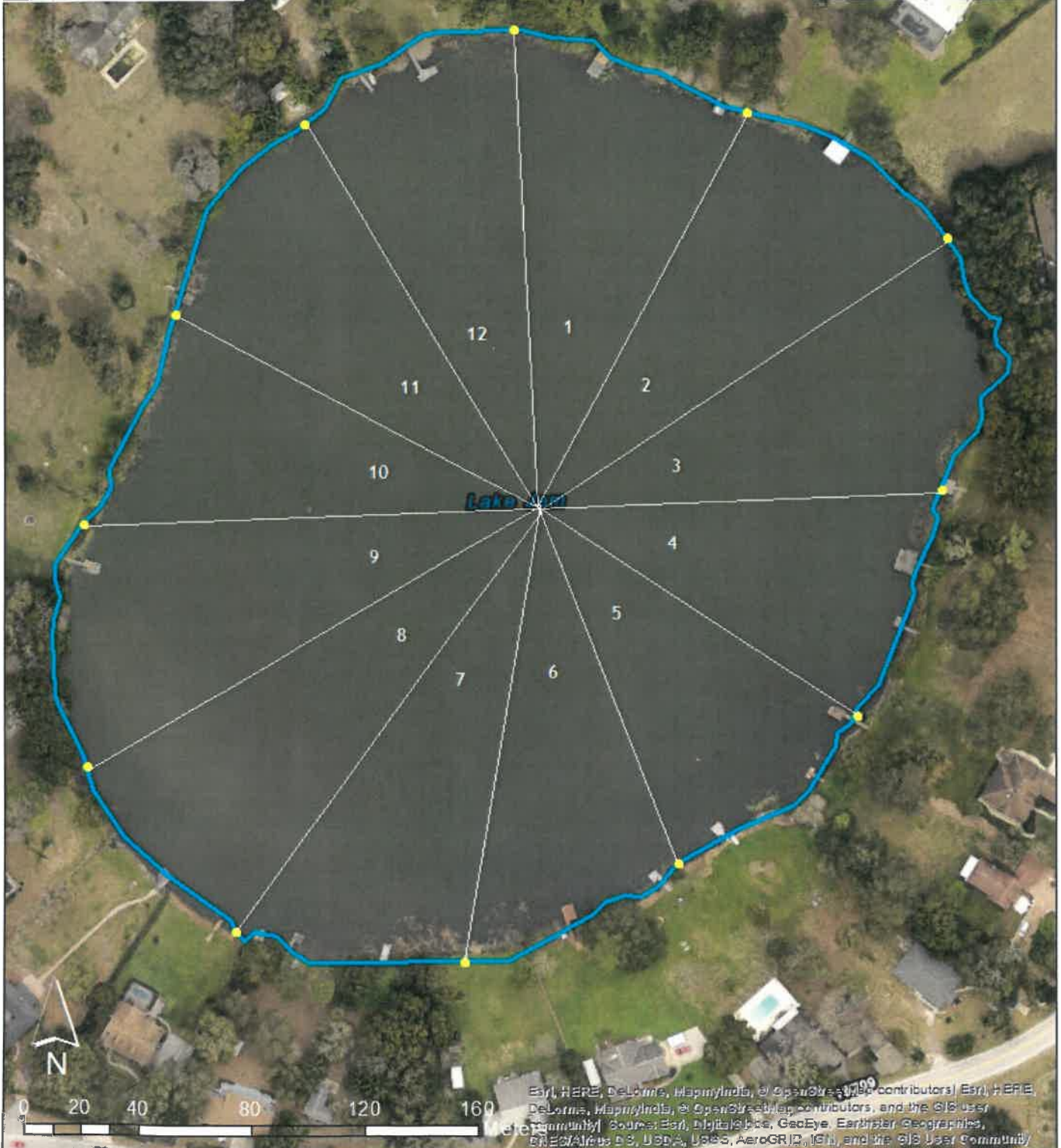
Date: 5/9/18	Waterbody: Lake Jean	County: Lake									
STORET: GICE0091	Signature: K March	Analyst: KWM, LB									
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic. It is important to note dominant 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 2, 5, 8, 11 3, 6, 9, 12									
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Acer rubrum						Fraxinus caroliniana					
Alternanthera philoxeroides		✓				*Fuirena					
Andropogon sp.						Fuirena scirpoidea					
Annona glabra						Gordonia lasianthus	✓			✓	
Azolla filiculoides (A. caroliniana)						Habenaria repens					
Baccharis sp.						Hibiscus grandiflora					
Bacopa caroliniana						Hymenachne amplexicaulis					
Bacopa monnieri						Hydrilla verticillata					
Bidens laevis alba	✓	✓		✓		Hydrocotyle sp.	✓	✓	✓	✓	
Bidens mitis						Hygrophila polysperma					
Blechnum serrulatum	✓	✓		✓		*Hypericum fasciculatum					
Boehmeria cylindrica		✓		✓		*Hypericum hypericoides					
Brasenia schreberi						*Hypericum myrtifolium					
Cabomba caroliniana						Ilex cassine					
Casuarina equisetifolia						Ipomoea aquatica					
Centella asiatica						Ipomoea sagittata					
Cephalanthus occidentalis		✓				Itea virginica					
Ceratophyllum demersum						Juncus effusus					
Chara sp.						*Juncus marginatus		✓	✓		
Cicuta sp.						*Juncus megacephalus					
Cladium jamaicense						Juncus repens					
Cliftonia monophylla						*Juncus scirpoides					
Colocasia esculenta	✓	✓	✓	✓		Lachnanthes caroliniana					
*Commelina						Leersia hexandra					
Crinum americanum						Landoltia punctata (Spirodela punctata)					
* Cyperus alternifolius (C. involucratus)						Lemna sp.					
Cyperus articulatus						Leucothoe racemosa (Eubotrys racemosa)					
Cyperus haspan						Limnium spongia					
*Cyperus lecontei				✓		Limnophila sessiliflora					
*Cyperus polystachyos						Liquidambar styraciflua					
*Cyperus odoratus						*Ludwigia arcuata					
*Cyperus surinamensis						*Ludwigia leptocarpa					
Cyrtilla racemiflora						*Ludwigia linearis					
Decodon verticillatus						*Ludwigia octovalvis					
Diodia virginiana						*Ludwigia peruviana		✓	✓		
*Echinochloa crus-galli						*Ludwigia repens					
*Echinochloa muricatum						*Ludwigia					
Echinochloa walteri						Luziola fluitans (Hydrochloa carolinensis)					
Eclipta prostrata (E. alba)						Lyonia lucida					
Egeria densa						Camphor	✓	✓	✓	✓	
Eichhornia crassipes											
*Eleocharis baldwinii											
*Eleocharis submersa Sed	✓	✓	✓	✓							
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium		✓									

Site:						Date: 5/9/18					
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Magnolia virginiana						Sabal palmetto					
Mayaca fluviatilis						Sacciolepis striata					
Melaleuca quinquenervia						*Sagittaria filiformis					
Micranthemum glomeratum						*Sagittaria graminea					
Micranthemum umbrosum						*Sagittaria isoetiformis					
Mikania scandens						Sagittaria lancifolia					
Mimosa pigra						Sagittaria latifolia					
Myrica cerifera						Salix caroliniana					
Myriophyllum aquaticum						Salvinia minima					
*Myriophyllum heterophyllum						Sambucus canadensis					
*Myriophyllum laxum						Sapium sebiferum					
*Myriophyllum pinnatum						Saururus cernuus					
Myriophyllum spicatum						Schinus terebinthifolius					
*Najas filifolia						*Schoenoplectus californicus (Cali bulrush)					
*Najas guadalupensis						*Schoenoplectus pungens (three square)					
*Najas minor						*Schoenoplectus tabernaemontani (softstem)					
Nelumbo lutea						Scirpus cubensis (Oxycaryon cubense)					
Nitella spp.						Scirpus cyperinus					
Nuphar sp.						*Sesbania vesicatoria (red flower) punicea					
Nymphaea odorata						Solidago sp.					
Nymphoides aquatica						Sparganium americanum					
Nyssa sylvatica var. biflora						Spartina bakeri					
Orontium aquaticum						Sphagneticola trilobata (Wedelia)					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Symphyotrichum carolinianum (Aster)					
Panicum hemitomon						Taxodium sp.					
Panicum repens						Thalia geniculata					
Paspalidium geminatum						Thelypteris palustris					
*Paspalum repens						Triadenum virginicum					
Paspalum urvillei						Typha sp.					
Peltandra sp.						Urochloa mutica (Brachiaria mutica)					
Persea sp.						*Utricularia gibba (U. biflora)					
Pennisetum purpureum						*Utricularia floridana					
Phragmites australis						*Utricularia foliosa					
Pinus elliotii						*Utricularia inflata					
Pistia stratioides						*Utricularia purpurea					
Pluchea sp.						*Utricularia cornuta					
*Polygonum glabrum (densiflorum)						*Utricularia radiata					
*Polygonum hydropiperoides						Vallisneria americana					
*Polygonum punctatum						*Websteria confervoides					
*Polygonum sp.						Wolffiella spp.					
Pontederia cordata						Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus						Butterfly ginger					
Proserpinaca pectinata						Vitis					
*Rhexia						Ptilimium ?					
*Rhynchospora corniculata						Phylla nodiflora					
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Rumex sp.											

Lake Jem 2837A

12/1	28.748205, -81.664568
1/2	28.747950, -81.663640
2/3	28.747554, -81.662991
3/4	28.746723, -81.663033
4/5	28.745997, -81.663313
5/6	28.745691, -81.663726

6/7	28.745267, -81.664756
7/8	28.745363, -81.665617
8/9	28.745856, -81.666135
9/10	28.746676, -81.666151
10/11	28.747323, -81.665843
11/12	28.747973, -81.665323



Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: CEN-DIST

Project ID: SMP

Requester: Michael Linger

Field Report Prepared By: K. March

Collected By: L. Bowman, K. March

Sampling Agency: 21FCEN

Location		WIN ID / Field ID →		Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID		Lake Jem @ Center (2837A)		Date 5/9/18 Time 1124		Date		(See pg 2)	
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)		mg/L Total Res. Chlorine			
Latitude		Longitude		Temp (C) 27.08		pH 8.08		Sample Depth 0.3	
Salinity (ppt) 0.14				Diss. Oxygen 9.25		Sp. Conductance (umho/cm) 293		A	
Location				Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID				Date		Date		Time	
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)		mg/L Total Res. Chlorine			
Latitude		Longitude		Temp (C)		pH		Sample Depth	
Salinity (ppt)				Diss. Oxygen		Sp. Conductance (umho/cm)			
Location				Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID				Date		Date		Time	
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)		mg/L Total Res. Chlorine			
Latitude		Longitude		Temp (C)		pH		Sample Depth	
Salinity (ppt)				Diss. Oxygen		Sp. Conductance (umho/cm)			
Location				Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID				Date		Date		Time	
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)		mg/L Total Res. Chlorine			
Latitude		Longitude		Temp (C)		pH		Sample Depth	
Salinity (ppt)				Diss. Oxygen		Sp. Conductance (umho/cm)			
Location				Collection (comp begin or grab)		Composite end		Bottle Group(s)	
Field ID				Date		Date		Time	
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)		mg/L Total Res. Chlorine			
Latitude		Longitude		Temp (C)		pH		Sample Depth	
Salinity (ppt)				Diss. Oxygen		Sp. Conductance (umho/cm)			

Relinquished By: K. March	Date/Time: 5/9/18 1600	Shipping Method: FedEx	Number of Coolers Shipped: 1	Received By: Tyler R.	Date/Time: 05/10/18 @ 9:45
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Group: A	Bottle Type:	P-1L	# of Bottles: 1	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:	P-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	CD-FLR-ECQ					
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	CHLSUITE-W					
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3					
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab
	W-PO4-F					