



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

PAGE 1 OF 16

STORET Station Name: Merritt's Mill Pond mid under powerlines

Date: 06/15/2016

STORET Station ID: G2WA0008

WBID: 180A

Latitude: 30.7698

(mm/dd/yyyy)

County: Jackson

RQ - RQ-2016-06-13-47

ORG ID: 21FLWQA

Longitude: -85.1731

(Decimal Degrees)

Receiving Body of Water: Chipola River

Field ID: G2WA0008

(Decimal Degrees)

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation Check	Duplicate Collection	Blank Collection
	Curtis Musson	X	X			
	Ben Ralys					
	Blake Spencer	X	X	X	X	

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 / Low / <u>Normal</u> / High / Flooded	Matrix:	<u>Fresh</u> / Marine / DI
Meter ID#	Biology 2	Photos:	Yes / <u>No</u>
		Tide Falling:	Yes / No / <u>N/A</u>

Field Sample

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	10:55	0.3	2.0	9.02	109.1	7.76	0.13	10B	279	24.97
CEN	11:00	1.5		9.62	114.7	7.78	0.13		278	24.10

Biological Samples Collected:		<u>None</u>	HA	SCI	LVS	RPS	Other
Parameter Suite	Parameter Methods						
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP						
Metals	☒ W-ICPMS / ☒ W-ICP						
Filtered Nutrients	☒ W-PO4-F / ☒ Field Filtered 0.45 um Filter						
Chlorophyll	☒ CHLSUTE-W						
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CLIC / W-COLOR / W-SO4-IC / W-TDS						
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY						
Macroinvertebrates	☐ MI-FW-QUDC						
Microbiology	☐ E Coli / ☐ F Coli / ☐ Entero / ☐ QPCR						
Periphyton	☐ ALGAE-ID						
Pesticides	☐ W-PSNP-TQ / ☐ W-AHERB-AA / ☐ W-PYR-AA-R						
	☐ W-PC-AA-SF / ☐ W-UHERB-AA / ☐ W-GLYPH						

Contains 1:1 Sulfuric Acid SA-5259020 EXP: 09/16/16 Warning! See MSDS

Contains 1:1 Sulfuric Acid SA-5259030 EXP: 09/16/16 Warning! See MSDS

QA/QC Sample Information

Duplicate

Time Zone: <u>EST</u> CEN		Sample Depth (m): <u>0.3</u>		Field ID: G2WA0008D			
Time: <u>10:55</u>		Total Depth (m): <u>2.0</u>					
Parameter Suite	Parameter Methods			Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP ☒ W-CPMS / ☒ W-ICP			☒ Ice	SA-5259020	09/16/2016	☒ < 2
Metals	☒ W-PCMS			☒ Ice	NA-5259030	09/16/2016	☒ < 2
Filtered Nutrients	☒ W-PO4-F / ☒ Field Filtered 0.45 µm Filter ☒ CHLSUITE-W			☒ Ice	Contains 1:1 Nitric Acid NA-5259030 EXP: 09/16/16 Warning! See MSDS		
Chlorophyll	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS ☐ Alkalinity / W-F / W-TSS / TURBIDITY			☒ Ice			
Physical/Aggregate (Fresh)	☐ Alkalinity / W-F / W-TSS / TURBIDITY			☐ Ice	Contains 1:1 Sulfuric Acid SA-5259020 EXP: 09/16/16 Warning! See MSDS		
Physical/Aggregate (Marine)	☐ E Coli			☐ Ice			
Microbiology	☐ W-PSNP-TQ / ☐ W-AHERB-AA / ☐ QPCR ☐ W-PC-AA-SF / ☐ W-UHERB-AA / ☐ W-GLYPH			☐ Ice			
Pesticides				☐ Ice			
				☐ Other			

Blank

Time Zone: <u>EST</u> CEN		Time: <u>15:47</u>		Field ID: G2WA0008B		Location: <u>BNC</u>	
☒ Field Blank		☐ Equipment Blank		☐ Field Cleaned Equipment Blank		Equipment ID NA	
Parameter Suite	Parameter Methods			Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP ☐ W-CPMS / ☐ W-ICP			☐ Ice	SA-5259020	09/16/2016	☐ < 2
Metals	☐ W-PCMS			☐ Ice	NA-5259030	09/16/2016	☐ < 2
Filtered Nutrients	☐ W-PO4-F / ☐ Field Filtered 0.45 µm Filter ☐ CHLSUITE-W			☐ Ice	Contains 1:1 Sulfuric Acid SA-5259020 EXP: 09/16/16 Warning! See MSDS		
Chlorophyll	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS ☐ Alkalinity / W-F / W-TSS / TURBIDITY			☐ Ice			
Physical/Aggregate (Fresh)	☐ E Coli			☐ Ice	Contains 1:1 Nitric Acid NA-5259030 EXP: 09/16/16 Warning! See MSDS		
Physical/Aggregate (Marine)	☐ W-PSNP-TQ / ☐ W-AHERB-AA / ☐ QPCR ☐ W-PC-AA-SF / ☐ W-UHERB-AA / ☐ W-GLYPH			☐ Ice			
Microbiology				☐ Ice			
Pesticides				☐ Other			

Notes:

Cloud cover

30%

QA/QC Duplicate G2WA0008D

15 June 2016 Merritt's Mill Pond mid under power line



QA/QC BLANK

15 June 2016



G2WA0008 15 June 2016

Merritt's Mill Pond mid under power lines

Signature: Agustin

Date: 6-15-2016

Field Parameters Entered into LIMS: CM 6-17-2016

(Initials/Date)

Field Parameters QC in LIMS: CA 6-20-2016

(Initials/Date)

Date Migrated to STORET: _____

Field Sheets Scanned/Saved: _____

(Initials/Date)

(Initials/Date)

Macro: 9821

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

BR 6/20/16 SPT0176242

Waterbody: Merritt's Mill Pond mid under powerlines		County: Jackson		Date: 06/15/2016					
Analyst: Curtis Musson, Blake Spencer		Signature: <i>Curtis Musson</i>		STORET: G2WA0008					
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.									
SPECIES	36	9	12	Collected? (N)	SPECIES	36	9	12	Collected? (N)
Acer rubrum	X	X	X		Habenaria repens				
Alternanthera philoxeroides	X	X	X		Hydrilla verticillata				
Andropogon sp.					Hydrocotyle sp.	X	X	X	
Azolla filiculoides (A. caroliniana)					Hygrophila polysperma				
Baccharis sp.					*Hypericum fasciculatum				
Bacopa caroliniana					*Hypericum hypericoides				
Bacopa monnieri					*Hypericum myrtifolium				
Bidens laevis					Ilex cassine				
Bidens mitis					Ipomoea aquatica				
Blechnum serrulatum					Ipomoea sagittata				
Boehmeria cylindrica	X	X	X		Itea virginica				
Brasenia schreberi					Juncus effusus				
Cabomba caroliniana					*Juncus marginatus				
Casuarina equisetifolia					*Juncus megacephalus				
Centella asiatica					Juncus repens				
Cephalanthus occidentalis	X	X	X		*Juncus scirpoides				
Ceratophyllum demersum 121	X	X	X		Lachnanthes caroliniana				
Chara sp.	X	X	X		Leersia hexandra				
Cladium jamaicense	X	X	X		Landoltia punctata (Spirodela punctata)				
Cliffonia monophylla	X	X	X		Lemna sp.	X	X	X	
Colocasia esculenta	X	X	X		Leucothoe racemosa (Eubotrys racemosa)				
*Commelina					Limnium spongia				
Crinum americanum					Limnophila sessiliflora				
*Cyperus alternifolius (C. involucreatus)					Liquidambar styraciflua	X	X	X	
Cyperus articulatus					*Ludwigia arcuata				
Cyperus haspan					*Ludwigia leptocarpa				
*Cyperus lecontei					*Ludwigia linearis				
*Cyperus polystachyos					*Ludwigia octovalvis				
*Cyperus odoratus	X				*Ludwigia peruviana				
*Cyperus surinamensis					*Ludwigia repens				
Cyrtilla racemiflora	X	X	X		*Ludwigia				
Decodon verticillatus					Luziola fluitans (Hydrochloa carolinensis)				
Diodia virginiana					Lyonia lucida	X	X	X	
*Echinochloa crus-galli					Magnolia virginiana				
*Echinochloa muricatum					Mayaca fluviatilis				
Echinochloa walteri					Melaleuca quinquenervia				
Eclipta prostrata (E. alba)					Micranthemum glomeratum				
Egeria densa					Micranthemum umbrosum				
Eichhornia crassipes	X	X			Mikania scandens				
*Eleocharis baldwinii					Mimosa pigra				
*Eleocharis					Myrica cerifera				
Eleocharis cellulosa					<i>Myrica grandiflora</i>	X	X	X	
Eleocharis equisetoides					<i>Lycopus virginicus</i>	X	X	X	
Eleocharis interstincta					<i>Lycopus virginicus</i>	X	X	X	
*Eriocaulon compressum					<i>Lycopus virginicus</i>	X	X	X	
*Eriocaulon decangulare					<i>Yellow Flag Iris pseudoterns</i>	X	X	X	
Eupatorium capillifolium					<i>Rosea palustris</i>	X	X	X	
*Fuirena					<i>Prun. ligustrum</i>	X	X	X	
Fuirena scirpoides					<i>Alder</i>	X	X	X	
Gordonia lasianthus					<i>Aster scutellatus</i>	X	X	X	

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:

Date:

SPECIES	3	6	9	12	Collected? (V)	SPECIES	3	6	9	12	Collected? (V)
Myriophyllum aquaticum				X		Salix caroliniana				X	X
*Myriophyllum heterophyllum						Salvinia minima				X	X
*Myriophyllum laxum						Sambucus canadensis				X	X
*Myriophyllum pinnatum						Sapium sebiferum					
Myriophyllum spicatum						Saururus cernuus					
*Najas filifolia						Schinus terebinthifolius					
*Najas guadalupensis						*Schoenoplectus californicus					
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea						*Schoenoplectus tabernaemontani (Scripus validus)					
Nitella spp.						Scripus cubensis (Oxycaryon cubense)					
Nuphar sp.						Scripus cyperinus					
Nymphaea odorata						*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora	X	X	X	X		Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrrhiza					
Osmunda regalis						Taxodium sp.					X
Panicum hemitomon						Thalia geniculata					
Panicum repens				X		Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum					
*Paspalum repens						Typha sp.					X
Paspalum urvillei						Urochloa mutica (Brachiaria mutica)					
Peltandra sp.						*Utricularia gibba (U. biflora)					
Persea sp.						*Utricularia floridana					
Pennisetum purpureum						*Utricularia foliosa					
Phragmites australis						*Utricularia inflata					
Pinus elliotii						*Utricularia purpurea					
Pistia stratioides						*Utricularia cornuta					
Pluchea sp.						*Utricularia radiata					
*Polygonum glabrum (densiflorum)						Vallisneria americana					X
*Polygonum hydropiperoides						*Websteria confervoides					X
*Polygonum punctatum						Wedelia trilobata (Sphagneticola trilobata)					
*Polygonum						Wolffiella spp.					X
Pontederia cordata						Woodwardia virginica					X
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton ilinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata						Carex albolytescens					X
*Rhexia						Rea bry					X
*Rhynchospora corniculata						Cercis canadensis					X
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sagittaria Sagittaria repens				X							
Sagittaria striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											
Sagittaria Kyrziana											

Search Existing Stations by:

- ☒ Visit ID (SBIO Sample ID)
☐ STORET Station ID

Search:

76242

STORET Station:

Visit ID (SBIO Sample ID):

76242

Lake Segments Sampled

- ☐ 1, 4, 7, 10
☐ 2, 5, 8, 11
☒ 3, 6, 9, 12

New Information:

New Macrophyte ID: 9821

Sampling Agency: FDEP - Biology

Identifier: Spencer, Blake

LIMS ID:

Comments:

Over 100 Grass Carp, Grass Carp were not seen during previous sampling events. Vallisneria a. population in decline.

population in decline.

Existing Station Visit Information

Station: G2WVA0008

Sample Date: 6/15/2016

Waterbody: MERRITTS MILL POND

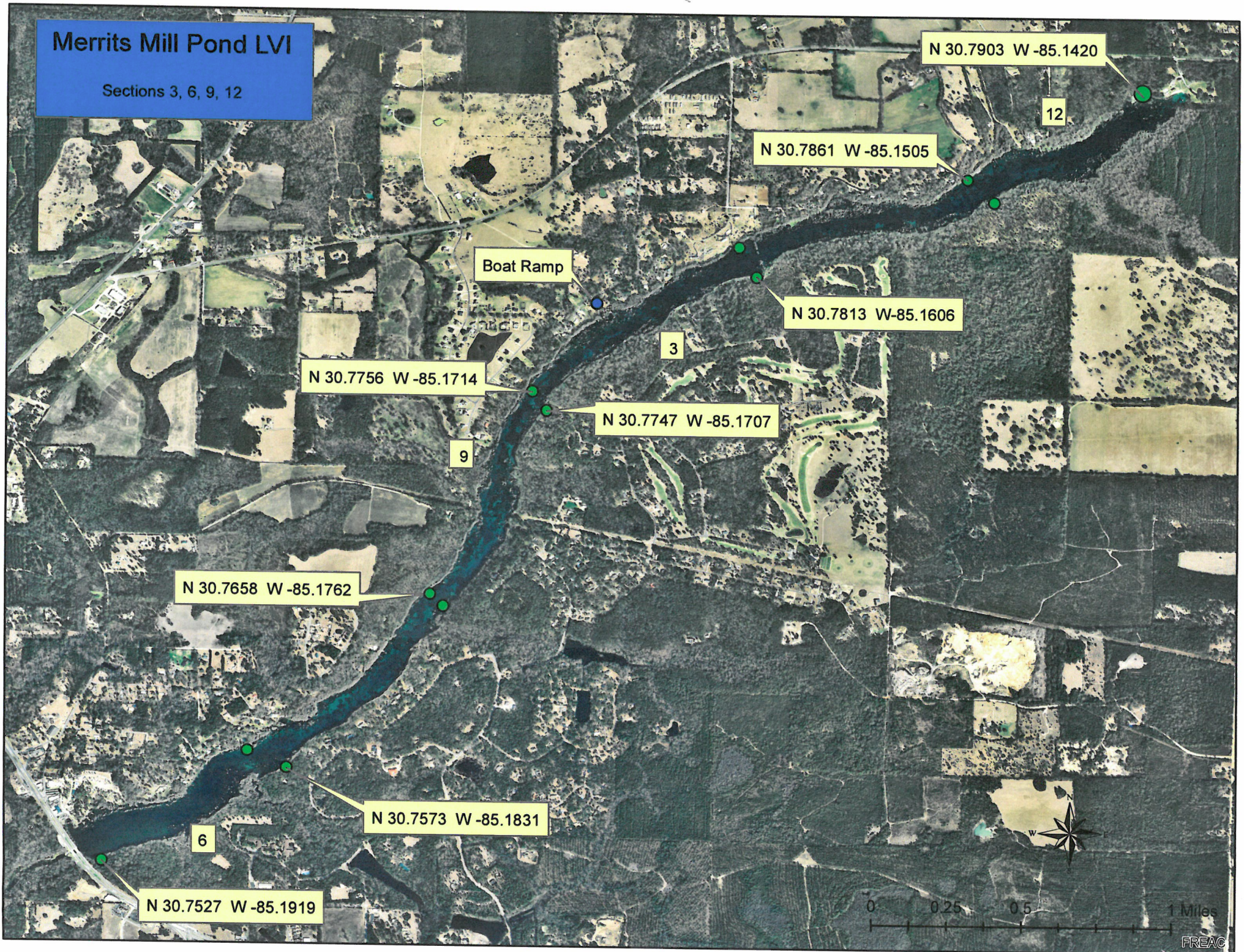
Herbaceous Species	3	6	9	12
X Acer rubrum			P	P P P
X Alternanthera philoxeroides				P
X Baccharis				P
X Boehmeria cylindrica			P	P P P
X Cephalanthus occidentalis			P	P P P
X Ceratophyllum demersum			P	P P D
X Chaia			P	P P P
X Cladium jamaicense			P	P P P
X Colocasia esculenta			P	P P P
X Cyperus odoratus			P	P
X Cyrilla racemiflora			P	P P
X Eichhornia crassipes				P
X Eupatorium capillifolium				P
X Hydrocotyle				P P P
X Lemna				P P P P
X Liquidambar styraciflua				P P P
X Magnolia virginiana				P P P
X Myrica cerifera				P P P
X Myriophyllum aquaticum				P
X Nyssa sylvatica biflora				P P P
X Panicum repens				P
X Polygonum glabrum				P
X Salix caroliniana				P P
X Salvinia minima				P P
X Sambucus canadensis				P P
X Taxodium				D D D
X Typha				P
X Vallisneria americana				P P P
X Wolffia				P P P
X Serehoa repens				P P
X Sagittaria kurziana				P
X Carex albolutescens				P P P
X Magnolia grandiflora				P P
X Lycopodium virginicum				P
X Fraxinus caroliniana				P P P
X Iris pseudacorus				P P
X Rosa palustris				P P P
X Ligustrum sinense				P
X Alnus serrulata				P P

Double click plant name to add to the list:

CM 6-20-2016 ✓

Merrits Mill Pond LVI

Sections 3, 6, 9, 12



LAKE OBSERVATION FIELD SHEET

SAMPLE ID: G2WAC008 MACROPHYTE ID: 30.7698
 COUNTY: Jackson STORET #: G2WAC008
 DATE: 6-15-2016 TIME: 11:12
 SITE NAME: Mettis Mill Pond
 FIELD ID/NAME: G2WAC008
 WATERSHED / LAKESIDE FEATURES

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category - from GIS)																		LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)		
Forest/Natural		Silviculture		Field/Pasture		Agricultural		Residential		Commercial		Industrial		Other (Specify)		LDI:		Land Use Source & Year:		
28.6	4.9	36.2	3.0	11.2	0.4	0.6	0.2											3.00		
Local Watershed Erosion (select one): ☒ None ☐ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy																		Artificially Impounded		
STORMWATER INPUTS Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation																		Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place		
LAKESIDE ALTERATIONS 10																		Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place		
13																		Highly developed or disturbed (>70% of lakeside affected)		
BUFFER ZONE 15																		< 29% of shoreline with >18m buffer		

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water:										Water Odors:											
Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No										☐ Sewage ☐ Petroleum ☐ Other											
Color Sample Taken? ☒ Yes ☐ No Lot # <u>525900</u> Exp. Date: <u>9/16/14</u>										Water Surface Oils: ☒ None											
Alkalinity Sample Taken? ☒ Yes ☐ No										☐ Sheen/Slick ☐ Glob ☐ Other											
Water Level ☐ Low ☒ Normal ☐ High																					
Meter Readings:		Depth (M)		Temp. (°C)		pH (SU)		D.O. (MG/L)		D.O. Sat. (%)		Cond. (UMHO/CM)		Salinity (PPT)		Clarity:		Color:		Total Station Depth (M)	
Top: <u>0.3</u>		<u>—</u>		<u>24.97</u>		<u>7.76</u>		<u>9.02</u>		<u>109.1</u>		<u>279</u>		<u>0.13</u>		☒ Clear		☐ Tannic		☒ Clear	
Mid-Depth: <u>—</u>		<u>—</u>		<u>—</u>		<u>—</u>		<u>—</u>		<u>—</u>		<u>—</u>		<u>—</u>		☐ Opaque		☐ Turbid		☐ Green	
Bottom: <u>1.05</u>		<u>24.18</u>		<u>7.78</u>		<u>9.62</u>		<u>114.7</u>		<u>278</u>		<u>0.13</u>		<u>—</u>		☐ Slightly Turbid		☐ SECCHI (M)		☒ VOB	
Sediment Type: (may check more than one)		☐ Sandy		☒ Organic fibrous (peaty, CPOM)		☐ Sand/Silt		☐ Organic smooth (muck)		Sample Taken? ☐ Yes ☒ No		Sediment Odors:		☐ Normal		☐ Anaerobic		☐ Other (Specify):		<u>NA</u>	
Biological Communities:										Additional Notes:											
LVI Conducted? ☒ Yes ☐ No										Grass carp >100.											
Phytoplankton Sample Taken? ☐ Yes ☒ No										Not Present 3 months Ago, 3-2016											
Sample Preserved? ☐ Yes ☐ No																					
Lot #: _____ Exp Date: _____																					
Algal Bloom/Algal ID Sample Taken? ☒ Yes ☐ No																					
Active Vegetation Mgmt? ☒ Yes ☐ No ☐ Don't Know																					
Weather Conditions: <u>Warm, 80's, clear sky No rain</u>																					

SAMPLING TEAM: Curtis Mussen, Ben Rehrs SIGNATURE: Curtis Mussen DATE: 6/15/16

Blake Spencer

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

STORET STATION NUMBER:		DATE 06/15/2016		LAKE NAME: MERRITT'S MILL POND		FIELD ID / NAME: G2WA0008	
ECO-REGION:		COUNTY: JACKSON		SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE:	
PARAMETER		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	
HYDROLOGY		☐		☐		☒	
Color		Very clear, uncolored water (benthic sampling appropriate) ☒		Water somewhat tannin stained (benthic sampling appropriate) ☐		Dark, discolored water (water color 20 PCU or higher) ☐	
		Optimal		Suboptimal		Marginal	
Secchi		Secchi >3 m		Secchi(m)		10 9 8 7 6	
20		20 19 18 17 16		3 2.6 2.2 1.8 1.4		0.5 0.4 0.3 0.2 0.1	
Vegetation Quality		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		Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed)	
19		20 19 18 17 16		15 14 13 12 11		5 4 3 2 1	
Stormwater Inputs		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		Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place	
18		20 19 18 17 16		15 14 13 12 11		5 4 3 2 1	
Bottom Substrate Quality		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		Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom	
10		20 19 18 17 16		15 14 13 12 11		5 4 3 2 1	
Lakeside Adverse Human Alternations		Very few man-made structures, roads, or other disturbance adjacent to lake (<10%)		Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected		Highly developed or disturbed (>70% of lakeside affected)	
13		20 19 18 17 16		15 14 13 12 11		5 4 3 2 1	
Upland Buffer Zone		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		< 29% of shoreline with >18m buffer	
15		20 19 18 17 16		15 14 13 12 11		5 4 3 2 1	
Adverse Watershed Land Use		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		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			
9		20 19 18 17 16		15 14 13 12 11		5 4 3 2 1	

TOTAL SCORE 104 COMMENTS: Hundreds of Grass Carp

ANALYSIS DATE: 6-15-2016 ANALYST: Curtis Mussen SIGNATURE: *Curtis Mussen*

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

Meter **Biology 2**

RQ- **RQ-2016-06-13-47**

Project **BMAP-Merritts Mill**

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

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 06/03/2016

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	6-15-16	0713	23.0	8.58	8.57	100.0	49.2	—	P	LAB
ICV	Curtis Mussen	6-15-16	0717	23.0	8.58	8.58	100.1	49.2	—	P	LAB
CCV	Curtis Mussen	6-15-16	1007	26.4	7.98	7.97	99.8	57.4	—	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 $\mu\text{mhos/cm}$	Meter Reading $\mu\text{mhos/cm}$	Pass / Fail	Lab / Field
Calibr.	Curtis Mussen	6-15-16	0721	160330D	04/20/17	1,000	1000	P	LAB
ICV	Curtis Mussen	6-15-16	0722	160330D	04/20/17	1,000	1000	P	LAB
CCV	Curtis Mussen	6-15-16	1608	2601533	12/24/17	100	105	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.	Curtis Mussen	6-15-16	0725	160330B	10/20/17	7.0	7.00	-13.8	P	L
Calibr.	Curtis Mussen	6-15-16	0728	160330A	04/20/17	4.0	4.00	165.1	P	L
Calibr.	Curtis Mussen	6-15-16	0730	160330C	10/20/17	10.0	9.98	-185.1	P	L
ICV	Curtis Mussen	6-15-16	0733	160330B	04/20/17	7.00	7.05	-14.1	P	L
CCV	Curtis Mussen	6-15-16	1610	160330C	10/20/17	10.0	10.04	-188.4	P	L
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 $\pm 0.05\text{m}$, whichever is greater

Requester: Benjamin Ralys
Collected By: Curtis Mussen, Ben Ralys

Colts Mustang

Relinquished By: Curtis M. Moss	Date/Time 5/15/2016	Shipping Method DPO OFD	Number of Coolers Shipped: 2	Received By: SK	Date/Time 6-15-16/4/16
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					Number of Coolers Shipped:	Received By: <i>S</i>	Date/Time 6-15-16 7:16
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Cooler Packing Worksheet for Request: RQ-2016-06-13-47

Merritt's Mill Pond

Ship Cooler On: 5/31/2016

Requester: Benjamin Ralys

Customer/Project: WQAP/BMAP

Priority: 3

850-245-8443

2600 Blair Stone Rd

MS #3560

Tallahassee, FL 32399-2400

Attn: Benjamin Ralys

Comments:

1 - case of Sulfuric Acid

Bottle Group A: Freshwater chemistry including metals.

Bottle Group B: 1 Field Blank (Please include enough DI water for 1 field blank (freshwater chemistry including metals)

Bottle Group C: Algal ID

Bottle Group D: 1 Duplicate

BOD-UNIN removed 5/31 jhw

BOD-UNIN added back 6/3 jhw

Requested Analyses:

Bottle Group: A

of Sites: 3

Container ID: P-1L

Qty: 3

Preservation: ICE

Lot #

Description: Plastic Bottle 1L

00064935

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

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)

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 3

Preservation: ICE

Lot #

Description: Plastic Bottle 1L

00064935

Analysis

BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 3 Preservation: ICE

Lot # 1168614

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 3 Preservation: HNO3

Lot # 00064947

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

Container ID: P-500ML

Qty: 3 Preservation: ICE And H2SO4

Lot # 00064947

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: 3 Preservation: ICE-FLTR

Lot # 00064310

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 # 00064935

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

Description

Alkalinity in aqueous matrices as mg CaCO3/L
Turbidity in aqueous matrices

W-CL-IC Chloride in aqueous matrices
W-COLOR True Color measured at 450 nm
W-F Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-TDS Total Dissolved Solids in aqueous matrices
W-TSS Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00064935

Description: Plastic Bottle 1L

Analysis
BOD-UNIN

Description
BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 11608614

Description: Brown Plastic Bottle 1L

Analysis
CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00064947

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis
W-ICP

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00064947

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis
W-NH3

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: ICE-FLTR Lot # 00064310

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: PT-50ML

Qty: 1 Preservation: ICE Lot # 430897

Description: Plastic Tube 50 mL

Analysis
ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Bottle Group: D # of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE Lot # 00064935

Description: Plastic Bottle 1L

Analysis
ALKALINITY
TURBIDITY
W-CL-IC
W-COLOR
W-F
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)
Total Dissolved Solids in aqueous matrices
Total Suspended Solids in aqueous matrices

Container ID: P-1L

Qty: 1 Preservation: ICE Lot # 00064935

Description: Plastic Bottle 1L

Analysis
BOD-UNIN

Description

BOD, NOT nitrogen-inhibited

Container ID: BP-1L

Qty: 1 Preservation: ICE Lot # 1168614

Description: Brown Plastic Bottle 1L

Analysis

Description

Container ID: P-500ML Qty: 1 Preservation: HNO3

Lot # 00064947

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

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00064947

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: ICE-FLTR

Lot # 00064310

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By: WUBDate: 6/10/16DEP Cooler ID #(s): 2 coolers

Kit must also include:

☒ Field Sheets☒ Temperature Control Bottle (1 per cooler)☒ FedEx Bills, if applicable (1 per cooler)☒ Plastic Bags☒ Zip Ties

If Preservation Included:

ID

Lot #

ID

Lot #

ID

Lot #

ID

Lot #

ID

Lot #

PLEASE RETURN ALL COOLERS FOR RQ-2016-06-13-47