Request Number: RQ-2017-07-17-44

Tick Island Mud Lake / Spring Garden Crk

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Apr 7, 2016

Customer: CEN-DIST

Project ID: SMP

Requester: Michael Linger

Field Report Prepared By: Katie Williams

Collected By: Terry Riordan

Sampling Agency: 21FLCEN

Location: Spring Garden Creek @ 200m Upstream of Lake Woodruff

Field ID / STORET #: G2CE0081 (Field ID ↑ STORET ↓) G2CE0081

RQ-2017-07-17-44
Date: 07/2017

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 7/20/17 Time 1220 | ☐ Eastern ☐ Central | Composite end Date Time | Bottle Group(s) (See pg 2): C

Matrix (type, e.g., Salt, Fresh, etc): fresh | Diss. Oxygen: 3.8 ☑ mg/L ☐ % sat | Total Res. Chlorine (mg/L): n/a

Temp (C): 31.2 | pH: 6.4 | Sample Depth: 0.3 ☐ ft ☑ m | Sp. Conductance (umho/cm): 677

Salinity (ppt): 0.32 | Comments:

Location: Tick Island Mud Lake @ 350m South of Center

Field ID / STORET #: G4CE0135 (Field ID ↑ STORET ↓) G4CE0135

RQ-2017-07-17-44
Date: 07/2017

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 7/20/17 Time 1140 | ☐ Eastern ☐ Central | Composite end Date Time | Bottle Group(s): A/B

Matrix (type, e.g., Salt, Fresh, etc): fresh | Diss. Oxygen: 9.8 ☑ mg/L ☐ % sat | Total Res. Chlorine (mg/L): n/a

Temp (C): 31.0 | pH: 8.7 | Sample Depth: 0.3 ☐ ft ☑ m | Sp. Conductance (umho/cm): 1708

Salinity (ppt): 0.85 | Comments:

Location:

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | ☐ Eastern ☐ Central | Composite end Date Time | Bottle Group(s)

Field ID | Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)

STORET # | Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm)

Salinity (ppt) | Comments

Location:

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | ☐ Eastern ☐ Central | Composite end Date Time | Bottle Group(s)

Field ID | Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)

STORET # | Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm)

Salinity (ppt) | Comments

Relinquished By	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By	Date/Time
Katie Williams	7/20/17 1500	FedEx	2	[illegible]	7/21/17 9:35

Group:	Bottle Type:	# of Bottles:	Preservative:	Enter Number of Bottles Sent to Lab
A	P-1L	1	ICE	1
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS			
A	BP-1L	1	ICE	1
	CHLSUITE-W			
A	P-500ML	1	HNO3	1
	W-ICP W-ICPMS			
A	P-500ML	1	ICE And H2SO4	1
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC			
A	P-125ML	1	ICE-FLTR	1
	W-PO4-F			
B	BG-1L	2	ICE	2
	W-AHERB-AA W-GLYPH W-PYR-AA-R W-SUC-AA-R W-UHERB-AA			
B	BG-500ML	4	ICE	4
	W-CT-CI-R W-PCL-SQ-R			
B	BG-1L	4	ICE	4
	W-PSNP-TQ			

Group: C	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab 1
	ALKALINITY					
	TURBIDITY					
	W-CL-IC					
	W-COLOR					
	W-F					
	W-SO4-IC					
	W-TDS					
	W-TSS					

Group: C	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab 1
	CHLSUITE-W					

Group: C	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab 1
	W-NH3					
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					

Group: C	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab 1
	W-PO4-F					

RQ-2017-07-17-44

Date of Request: 30-JUN-2017
Created By: LINGER_M On: 30-JUN-2017
Modified By: MATTHEWS_D On: 06-JUL-2017
Customer: CEN-DIST
Project: SMP
Division:
District: Central District
Sampling Event: Tick Island Mud Lake / Spring Garden Crk

Send Coolers To:

Phone: 407-894-4180
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Michael Linger

Send Final Report To:

FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Michael Linger

Program Module Number: 1306
Priority: 3
Event Status: S
Criminal Investigation: NO
Chemistry Request Reviewed By: WATTS_J On: 03-JUL-2017
Biology Request Reviewed By: MATTHEWS_D On: 06-JUL-2017
Sampling Kit Required: YES Ship on: 10-JUL-2017
Sampling Kit Shipped: YES On: 10-JUL-2017
Sampling Kit Packed By: GREENWOO_J
Preservatives Needed: NO
Date to Receive Samples: 17-JUL-2017
Received By:

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

Comments: Group A & B: Tick
C: Spring Gar Lk

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-1L Number of Bottles: 1 Preserved With: ICE

ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
W-CL-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Chloride in aqueous matrices
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)
W-SO4-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices

Bottle Type: BP-1L Number of Bottles: 1 Preserved With: ICE

CHLSUITE-W	Template:	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Bottle Type: P-500ML Number of Bottles: 1 Preserved With: HNO3

W-ICP	Template:	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
Calcium		
Chromium		
Iron		
Magnesium		
Nickel		
Potassium		
Sodium		
Zinc		
W-ICPMS	Template:	(EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects
Arsenic		
Cadmium		

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-500ML Number of Bottles: 1 Preserved With: HNO3

W-ICPMS	Template:	(EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects
Copper		
Lead		
Silver		

Bottle Type: P-500ML Number of Bottles: 1 Preserved With: ICE And H2SO4

W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Template: DEFAULT	(EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Template: DEFAULT	(SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices

Bottle Type: P-125ML Number of Bottles: 1 Preserved With: ICE-FLTR

W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group B (Water) With 1 Samples:

Bottle Type: BG-1L Number of Bottles: 2 Preserved With: ICE

W-AHERB-AA	Template:	(USGS O-2060-01) Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS
W-GLYPH	Template: DEFAULT	(EPA 8321B) Glyphosate in water matrices by HPLC/MS/MS
W-PYR-AA-R	Template: DEFAULT	(EPA 8321B) Pyraclostrobin in water matrices by HPLC/MS/MS
W-SUC-AA-R	Template: DEFAULT	(EPA 8321B) Analysis of sucralose in water matrices by HPLC/MS/MS
W-UHERB-AA	Template: DEFAULT	(USGS O-2060-01) Urea herbicides and other chemicals in water matrices by HPLC/MS/MS

Bottle Type: BG-500ML Number of Bottles: 4 Preserved With: ICE

W-CT-CI-R	Template: DEFAULT	(EPA 8276) Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization
W-PCL-SQ-R	Template: DEFAULT	(EPA 8270D) Organochlorine pesticides in water matrices by GC/MS-SIM

Bottle Type: BG-1L Number of Bottles: 4 Preserved With: ICE

W-PSNP-TQ	Template: DEFAULT	(EPA 8270D) Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS

Bottle Group C (Water) With 1 Samples:

Bottle Type: BP-1L Number of Bottles: 1 Preserved With: ICE

CHLSUITE-W	Template:	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Bottle Type: P-500ML Number of Bottles: 1 Preserved With: ICE And H2SO4

W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Template: DEFAULT	(EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Template: DEFAULT	(SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices

Bottle Type: P-125ML Number of Bottles: 1 Preserved With: ICE-FLTR

W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Type: P-1L Number of Bottles: 1 Preserved With: ICE

ALKALINITY	Template: DEFAULT	(SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
W-CL-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Chloride in aqueous matrices
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)
W-SO4-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS	Template: DEFAULT	(SM 2540 C-97) Total Dissolved Solids in aqueous matrices
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices

* - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.

Log-in Checklist

RQ- 2017-07-17-44

Shipping Method: Fed Ex Date/Time of Receipt: 7/21/17 9:35

Cooler ID	Cooler Temperature*	No. Sample Containers in Cooler	Evidence Tape				Tracking # (fill out only if waybill copy is damaged)
			Present?		*Intact?		
			Yes	No	Yes	No	
RED	1.5°C	9		✓			
RED	1.3°C	10		✓			

*If the temperature of a cooler is above 6.0 °C (or above 10.0 °C for W-1-4-DIOX), or if Evidence Seal is damaged, identify the containers in the affected cooler(s) on back of this form.

**Note: If "No" is checked in any of the fields below, fill out the back of this form with additional details (Field ID, Test IDs, etc.) and generate an NCR.

**Chain of Custody/ Field Sheet(s) Included? Yes ✓ No____

CONTAINER CHECK

**Evidence Tape on Bottles? Yes____ No ✓ If yes, is it intact? Yes____ No____

**Caps on tight? Yes ✓ No____ **Containers intact? Yes ✓ No____

**Sufficient Sample Volume: Yes ✓ No____

CHLORINE CHECK (Blue dot on container)

Check the Box marked "Yes" or "No" for the Presence of Chlorine. If Cl detected, an NCR is required.

Analysis	Yes	No	Analysis	Yes	No
W-1,4 DIOX			W-PC-AA-SF		
W-AHERB-AA (-AHB-AA-R)		✓	W-PCL-SQ (-R)		✓
W-BNA (-625, -R)			W-PDQUAT		
W-CARB-AA (-CAB-AA-R)			W-PESTNP-R		
W-ENDO-AA			W-PSCL-TQ		
W-GLYPH		✓	W-PSNP-TQ		✓
W-NP-AA-SF			W-PST-CL-R		
W-PAH (-R)			W-TR-TQ		
W-PCB-R			W-CT-CI-R		✓

PRESERVATION CHECK (EXCLUDING SAMPLES SENT TO OVERFLOW LABS, "OV-")

**Acid Preserved Samples: pH ≤ 2.0? Yes ✓ No____ NA____ Init: A.D.

**W-1-4-DIOX (Green dot on container) preserved to pH < 4.0? Yes____ No____ NA ✓ Init: A.D.

Coolers Unpacked/Checked by: A.D. Date: 7/21/17 NCRs (Y/N)? ____

Event ID: CEM-DIST-2017-07-21-01 NCR # ____

Log-in Checklist

Samples with Incorrect pH Preservation or presence of Chlorine

Field ID	Bottle Test ID(s)	pH / Cl	Action Taken

Samples in Coolers with Incorrect Preservation or Damaged Evidence Tape

Cooler ID	Field ID	Bottle Test ID(s)

Bottles Not Intact

Field ID	Bottle Test ID(s)	Loose Cap	Damaged Cap		Damaged Container		Evidence Tape Not Intact
			CK	BR	CK	BR	

Samples with Insufficient Volume for Analyses

Field ID	Bottle Test ID(s)	Action Taken

ENCORE SAMPLES

S-VOC-MS samples in Encores must be frozen within 48 hours of collection.

Were Encore samples received? Yes____ No✓____

Date and time placed in freezer _____

Were all samples placed in freezer within 48 hours of collection? Yes_____ No_____

If no, were samples shipped on dry ice? Yes_____ No_____

FOR CLEAN LAB USE ONLY – Total Mercury Preservation Check (W-HG-AF; W-HG-AF-F):

Samples preserved within 48 hours? Yes_____ No_____

Date and time samples preserved: _____

Additional Comments:

01000

FedEx Express Package US Airbill

FedEx Tracking Number 8115 9551 6234

Form ID No. 0215

Recipient's Copy

1 From

Date 7/20/17

Sender's Name Kate Williams Phone

Company FDEP

Address 3319 Maguire Blvd Ste 232 Dept./Floor/Suite/Room

City Orlando State FL ZIP 32803

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIVING Phone 850 245-8085

Company FLORIDA DEP/CHEMISTRY SECTION

Address 2600 BLAIRSTONE RD Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City TALLAHASSEE State FL ZIP 32399

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0126912290

8115 9551 6234

4 Express Package Service • To most locations. Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5. Packaging • Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6. Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☐ Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.
☐ Direct Signature — Someone at recipient's address may sign for delivery.
☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods? One box must be checked.

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

[redacted]262

Total Packages ____ Total Weight ____ lbs. Credit Card Auth. ____

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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01000

FedEx Express Package US Airbill

FedEx Tracking Number 8115 9551 6267

Form ID No. 0215 — Recipient's Copy

1 From

Date 7/20/17

Sender's Name Katie Williams Phone 407 8974100

Company FDEP

Address 3319 Maguire Blvd Ste 232 Dept./Floor/Suite/Room

City Orlando State FL ZIP 32803

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIVING Phone 850 245-8085

Company FLORIDA DEP/CHEMISTRY SECTION

Address 2600 BLAIRSTONE RD Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City TALLAHASSEE State FL ZIP 32399

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0126912290

8115 9551 6267

4 Express Package Service * To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

[ ] FedEx Envelope* [ ] FedEx Pak* [ ] FedEx Box [ ] FedEx Tube [X] Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

- [ ] Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods? One box must be checked.

[✓] No [ ] Yes — As per attached Shipper's Declaration. [ ] Yes — Shipper's Declaration not required. [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

[ ] Sender Acct. No. in Section 1 will be billed. [X] Recipient [ ] Third Party [ ] Credit Card [ ] Cash/Check

[redacted]262

Total Packages ____ Total Weight ____ lbs. Credit Card Auth. ____

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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