Request Number: RQ-2017-03-20-51

Horse Creek/Elbow Creek

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Apr 7, 2016

Customer: CEN-DIST

Project ID: SMP

Requester: Michael Linger

Collected By: Leif Boman

Field Report Prepared By: Katie Williams

Sampling Agency: 21FLCEN

Location: Elbow Creek @ 540m Downstream of Apollo Blvd.

Field ID / STORET: G5CE0070 (Field ID ↑ STORET ↓) G5CE0070

STORET #: RQ-2017-03-20-57

Date: 04/10/17

Latitude ☐dd ☐dms | Longitude ☐dd ☐dms

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 4/10/17 Time 1042 | Eastern Central | Composite end Date Time | Bottle Group(s) (See pg 2): B

Matrix (type, e.g., Salt, Fresh, etc): fresh | Diss. Oxygen: 7.6 ☑ mg/L ☐ % sat | Total Res. Chlorine (mg/L): n/a

Temp (C): 21.1 | pH: 7.4 | Sample Depth: 0.1 ☐ ft ☑ m | Sp. Conductance (umho/cm): 686

Salinity (ppt): 0.33 | Comments:

Location: Horse Creek West of US Highway 1 Bridge

Field ID / STORET: G5CE0071 (Field ID ↑ STORET ↓) G5CE0071

STORET #: RQ-2017-03-20-57

Date: 04/10/17

Latitude ☐dd ☐dms | Longitude ☐dd ☐dms

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 4/10/17 Time | Eastern Central | Composite end Date Time | Bottle Group(s): A

Matrix (type, e.g., Salt, Fresh, etc): salt | Diss. Oxygen: 6.6 ☑ mg/L ☐ % sat | Total Res. Chlorine (mg/L): n/a

Temp (C): 25.0 | pH: 7.4 | Sample Depth: 0.3 ☐ ft ☑ m | Sp. Conductance (umho/cm): 30,020

Salinity (ppt): 18.6 | Comments:

Location: Horse Creek @ Croton Road Bridge

Field ID / STORET: G5CE0078 (Field ID ↑ STORET ↓) G5CE0078

STORET #: RQ-2017-03-20-57

Date: 04/10/17

Latitude ☐dd ☐dms | Longitude ☐dd ☐dms

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 4/10/17 Time 1230 | Eastern Central | Composite end Date Time | Bottle Group(s): A

Matrix (type, e.g., Salt, Fresh, etc): fresh | Diss. Oxygen: 7.5 ☑ mg/L ☐ % sat | Total Res. Chlorine (mg/L): n/a

Temp (C): 24.0 | pH: 7.9 | Sample Depth: ~~0.25~~ KW ☐ ft ☑ m | Sp. Conductance (umho/cm): 1198

Salinity (ppt): 0.60 | Comments: 0.1

Location:

Field ID:

STORET #:

Latitude ☐dd ☐dms | Longitude ☐dd ☐dms

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

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:

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
KWilliams	4/10/17 1500	FedEx	1	[signature]	4/11/17 9:55

Group: A	Bottle Type:	P-1L	# of Bottles:	2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	ALKALINITY TURBIDITY W-F W-TSS							
Group: A	Bottle Type:	BP-1L	# of Bottles:	2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	CHLSUITE-W							
Group: A	Bottle Type:	P-500ML	# of Bottles:	2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	2
	W-ICP W-ICPMS							
Group: A	Bottle Type:	P-500ML	# of Bottles:	2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	2
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC							
Group: A	Bottle Type:	P-125ML	# of Bottles:	2	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	2
	W-PO4-F							
Group: B	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: B	Bottle Type:	BP-1L	# of Bottles:	1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W							
Group: B	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							

Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	**Enter Number of Bottles Sent to Lab**	
	W-TKN					
	W-TOC					

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

RQ-2017-03-20-51

Date of Request: 02-MAR-2017
Created By: LINGER_M On: 02-MAR-2017
Modified By: MATTHEWS_D On: 06-MAR-2017
Customer: CEN-DIST
Project: SMP
Division: Division of Environmental Assessment and Restoration
District: Central District
Sampling Event: Horse Creek/Elbow Creek

Send Coolers To:

Phone: 407-897-4180
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Mike Linger

Send Final Report To:

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

Program Module Number: 1306
Priority: 3
Event Status: S
Criminal Investigation: NO
Chemistry Request Reviewed By: WATTS_J On: 03-MAR-2017
Biology Request Reviewed By: MATTHEWS_D On: 06-MAR-2017
Sampling Kit Required: YES Ship on: 13-MAR-2017
Sampling Kit Shipped: YES On: 13-MAR-2017
Sampling Kit Packed By: REYNOLDS_T
Preservatives Needed: NO
Date to Receive Samples: 20-MAR-2017
Received By:

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

Comments: A: Horse
B: Elbow

Bottle Group A (Water) With 2 Samples:

Bottle Type: P-1L Number of Bottles: 2 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-F	Template: DEFAULT	(SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-TSS	Template: DEFAULT	(SM 2540 D-97) Total Suspended Solids in aqueous matrices

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

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

Bottle Type: P-500ML Number of Bottles: 2 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
Chromium		
Iron		
Zinc		
W-ICPMS	Template: PRTY	(EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects
Arsenic		
Cadmium		
Copper		
Lead		
Nickel		
Silver		

Bottle Type: P-500ML Number of Bottles: 2 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

Bottle Group A (Water) With 2 Samples:

Bottle Type: P-500ML Number of Bottles: 2 Preserved With: ICE And H2SO4

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: 2 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: 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: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio 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

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:

Log-in Checklist

RQ-2017-03-20-51

Shipping Method: FedEx

Date/Time of Receipt: 4/11/17 9:55

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	0.8°C	14		✓			

*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-Cl-R		

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

**Acid Preserved Samples: pH ≤ 2.0? Yes ✓ No____ NA____ Init: JD

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

Coolers Unpacked/Checked by: JD Date: 4/11/17 NCRs (Y/N)? ____

Event ID: CEM-DIST-2017-04-11-01 NCR # ____

From:	Williams, Kathryn M.
To:	Greenwood, Jhamieka
Subject:	RE: RQ-2017-03-20-51
Date:	Tuesday, April 11, 2017 12:36:24 PM

12:10

From: Greenwood, Jhamieka
Sent: Tuesday, April 11, 2017 11:36 AM
To: Boman, Leif <Leif.Boman@dep.state.fl.us>; Williams, Kathryn M. <Kathryn.M.Williams@dep.state.fl.us>; Linger, Michael <Michael.Linger@dep.state.fl.us>
Cc: Watts, John <John.Watts@dep.state.fl.us>; Ayres, Joshua <Joshua.Ayres@dep.state.fl.us>
Subject: RQ-2017-03-20-51

Hi,

For RQ-2017-03-20-51, the sample collection time was not recorded for site G5CE0071 with location Horse Creek West of US Highway 1 Bridge. Can someone send me an email with the correct sample collection time asap, please.

Thanks,

Jhamieka S. Greenwood
Florida DEP Labs
Laboratory Tech IV
Scientific Support
Voice: (850) 245-8153
Direct: 58153
Jhamieka.Greenwood@dep.state.fl.us

01000

FedEx Express Package US Airbill

FedEx Tracking Number 8111 7111 4416

Form ID No. 0215 — Recipient's Copy

1 From

Date 4/10/17

Sender's Name Leif Boman Phone 407 897-4309

Company FDEP - CEROC

Address 3319 MAGUIRE ~~3609 RELICA~~ BLVD SUITE 232

Dept./Floor/Suite/Room

City Orlando State FL ZIP 32803

2 Your Internal Billing Reference

3 To

Recipient's Name Phone 850 245-8085

Company FLORIDA DEP/CHEMISTRY SECTION

Address 2600 BLAIRSTONE RD

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

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

City TALLAHASSEE State FL ZIP 32399-6542

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.

0125636852

8111 7111 4416

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	2 or 3 Business Days
☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.	☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.	☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.	☐ 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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