

RQ- 2019-02-04-58

Log-in Checklist

Login Station ID: #4

Shipping Method: FedEx | UPS | HD | GreyhoundDate/Time of Receipt: 02/07/2019 @ 10:15am

Cooler Temperature*	* All Samples in Cooler Preserved with		Number of Sample Containers in Cooler	Evidence Tape				Tracking # (fill out only if waybill copy is damaged)
	HNO ₃	Formalin		Present?		*Intact?		
				Yes	No	Yes	No	
1.1°C			9		X			4751 8776 0215

* HNO₃ and Formalin persevered samples do **NOT** have a temperature requirement. For all others, 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 below, fill out the back of this form (Field ID, Test IDs, etc.) and generate an NCR.

****Chain of Custody/ Field Sheet(s) Included?** Yes ☒ No ☐

Micro-Biology Overflow Chain of Custody/ Field Sheet(s) Included? Yes ☒ No ☐ Date 02/07/19

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 REQUIRED? (Blue dot on container) Yes ☒ No ☐ Init: NR

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-E8321-DI, -MS, -21		X	W-NP-AA-SF		
W-BNA (-625, -R)			W-PDQUAT		
W-CARB-AA (-CAB-AA-R)			W-PCL-SQ-R		
W-U2060-MS			W-TR-TQ		
W-PCB-R			W-CT-CI-R		
W-PAH (-R)			W-PSNP-TQ		
W-PFAS-MS					

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

****Acid Preserved Samples: pH ≤ 2.0?** Yes ☒ No ☐ NA ☐ Init: NR

****W-1-4-DIOX (Green dot on container) preserved to pH < 4.0?** Yes ☐ No ☒ NA ☒ Init: NR

Coolers Unpacked/Checked by: Tyler Reynolds Date: 02/07/2019

NCRs (Y/N)? N

Event ID: Long / Econ Trib / UnDrain / Robt
CEN-DIST-2019-02-07-02 (SMP)

NCR #

Date Received: 07-FEB-2019 10:15
 Federal Express REF-4-3-3

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

Additional Comments:

Infrared Thermometer ID:	REC_04_2018
pH Paper 0.0 – 3.0 Lot #	
pH Paper 0 – 13 Lot #	222516EXP:09/15/2019
Chlorine Test Strips Lot #	091417V EXP:09/2021

ENCORE SAMPLES

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

Were Encore samples received? Yes _____ No X

Date and time placed in freezer _____

Were all samples placed in freezer within 48 hours of collection? Yes _____ If No _____

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: _____

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: CEN-DIST

Project ID: SMP

Requester: Michael Linger

Collected By:

L.F. Boman

Field Report Prepared By:

Katie March

Sampling Agency:

2.FL.CEN

Location	WIN ID / Field ID →		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 2/6/19 Time 1224	Eastern Central	Composite end Date Time	Bottle Group(s) (See pg 2)	
Field ID	Long Branch @ 0.7 mi DS of CR 13			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen 7.27	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET				Temp (C) 15.9	pH 6.91	Sample Depth 0.2	Sp. Conductance (umho/cm) 269.5	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.13	Comments			B
Location	WIN ID / Field ID →		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 2/6/19 Time 1252	Eastern Central	Composite end Date Time	Bottle Group(s)	
Field ID	Long Branch @ 350m DS of CR 13			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen 7.77	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET				Temp (C) 16.3	pH 7.77	Sample Depth 0.2	Sp. Conductance (umho/cm) 273.5	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.13	Comments			B
Location	WIN ID / Field ID →		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 2/6/19 Time 1405	Eastern Central	Composite end Date Time	Bottle Group(s)	
Field ID	Econ River Trib @ 170 m N of Jay Blanchard Trail			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen 7.12	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET				Temp (C) 18.9	pH 6.97	Sample Depth 0.15	Sp. Conductance (umho/cm) 209.4	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.10	Comments			A
Location	WIN ID / Field ID →		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 2/6/19 Time 1146	Eastern Central	Composite end Date Time	Bottle Group(s)	
Field ID	Unnamed Drain @ Lake Live Oak Rd			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen 8.68	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #				Temp (C) 14.7	pH 7.51	Sample Depth 0.3	Sp. Conductance (umho/cm) 628.0	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.31	Comments			D

Relinquished By: K March	Date/Time 2/6/19 1600	Shipping Method FedEx	Number of Coolers Shipped: 1	Received By: Tyler Reynolds	Date/Time 02/07/19 @ 10:15am
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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	1 to ERO
	CD-ERD-EC						
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP W-ICPMS						
Group: A	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: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	P-250ML-WI-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2 to ERO
	CD-ERD-EC						
Group: B	Bottle Type:	QPCR-P-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	PCR-FILTER						
Group: B	Bottle Type:	BG-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	W-E8321-DI W-E8321-MS						
Group: C	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0

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:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: D	Bottle Type:	P-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1 to ERD
	CD-ERD-EC						

ENVIRONMENTAL RESEARCH & DESIGN, INC. --- CHAIN-OF-CUSTODY RECORD

3419 Trentwood Blvd., Suite 102 - Belle Isle (Orlando), FL 32812-4864 — Phone: (407) 855-9465 — Fax: (407) 826-0419

Client Name: Florida Department of Environmental Protection						Total Number of Bottles	ANALYSIS CODE											
Address: 3319 Maguire Blvd, Orlando, FL 32803							2-Liter Plastic	60 mL Plastic (filtered, F)	60 mL Plastic (Filtered/ Preserved with H ₂ SO ₄ , FP)	60 mL Plastic (Unfiltered) (Preserved with H ₂ SO ₄ , P)	500 mL Plastic	Glass (Preserved with HCl)	Metals:		250 mL Plastic (Preserved with HNO ₃)	Whirlpak	Other	Other
Project Contact: Michael Linger													UF	F				
Project Contact Phone: 407-897-4180																		
Project Name: RQ-2019- 02-04-58 Project #: SMP																		
Containers Accepted By: Andrew																		
Samples Collected By: LiF Roman																		
Sample I.D.	*Matrix	**IPC	ERD Sample I.D. No.	Date Collected	Time Collected													
GZUE0198	S	A	M-0227	2/6/19	1405	1											12a	
GZUE0199	S	A	M-0228	2/6/19	1252	1											12a	
GZUE0036	S	A	M-0229	2/6/19	1224	1											12a	
GZUE0168	S	A	M-0230	2/6/19	1146	1											12a	
																	12a	
DISPOSAL DATE:																		

*MATRIX: SW = Stormwater SP = Seepage S = Surface Water BF = Baseflow GW = Groundwater BP = Bulk Precipitation G = Grab C = Composite

**ICE PRESERVATION CODES (IPC): A = Transported in ice, ice present when received B = Transported in ice, ice not present when received C = Not transported in ice

CUSTODY TRANSFERS				Method of Shipment:		Received in Cooler: ☒ Y ☐ N		pH Checked in Laboratory (< 2 s.u.): ☐ Y ☒ N	
RELINQUISHED BY	RECEIVED BY	DATE	TIME	Delivered Directly to Lab: ☒ X		Cooler Temp. verification: <u>7°C</u>		Temp. Blank Provided ☐ Y ☒ N	
1. K March	LiF Roman	2/6/19	1441	Shipped By FedEx: _____		Temperature Blank Cooler #1: _____°C		Sulfuric Acid: Lot # _____	
2.				UPS: _____		Temperature Blank Cooler #2: _____°C		Chlorine Check (< 0.1 mg/l): ☐ Y ☒ N	
				Other: _____		Temperature Blank Cooler #3: _____°C			

COMMENTS: B39585

Date of Request: 17-JAN-2019
 Created By: LINGER_M On: 17-JAN-2019
 Modified By: JASROTIA_P On: 22-JAN-2019
 Customer: CEN-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Central District
 Sampling Event: Long / Econ Trib/ UnDrain / Roberts

Send Coolers To:

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

Program Module Number:

Priority: 3
 Event Status: S
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 18-JAN-2019
 Biology Request Reviewed By: JASROTIA_P On: 22-JAN-2019
 Sampling Kit Required: YES Ship on: 24-JAN-2019
 Sampling Kit Shipped: YES On: 24-JAN-2019
 Sampling Kit Packed By: KLUG_K
 Preservatives Needed: NO
 Date to Receive Samples: 04-FEB-2019
 Received By:

Send Final Report To:

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

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

Comments: A: Econ Trib
 B: Long X2
 C: Roberts
 D: Undrain

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 CaCO ₃ /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-SO ₄ -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 using a maximum of 250 mL of sample
Bottle Type: P-250ML-WI-THI	Number of Bottles: 1	Preserved With: ICE
CD-ERD-EC	Template: DEFAULT	(EPA 1603) Escherichia coli by membrane filter method by ERD Laboratory
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: HNO ₃
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
Barium		
Calcium		
Iron		
Magnesium		
Potassium		
Sodium		
Zinc		

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

*Boron
Aluminum
Antimony
Arsenic
Cadmium
Chromium
Copper
Lead
Nickel
Selenium
Silver
Thallium

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: FILTER-ICE
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 2 Samples:

Bottle Type: P-250ML-WI-THI	Number of Bottles: 2	Preserved With: ICE
CD-ERD-EC	Template: DEFAULT	(EPA 1603) Escherichia coli by membrane filter method by ERD Laboratory
Bottle Type: QPCR-P-500ML	Number of Bottles: 2	Preserved With: ICE
PCR-FILTER	Template: DEFAULT	(SOP-PCR-4.0) Preparation of Samples by Filtration and held for qPCR Analysis
Bottle Type: BG-500ML	Number of Bottles: 2	Preserved With: ICE
W-E8321-DI	Template:	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
W-E8321-MS	Template: DEFAULT	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Bottle Group C (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 using a maximum of 250 mL of sample

Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(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: FILTER-ICE
W-PO4-F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group D (Water) With 1 Samples:

Bottle Type: P-250ML-WI-THI	Number of Bottles: 1	Preserved With: ICE
CD-ERD-EC	Template: DEFAULT	(EPA 1603) Escherichia coli by membrane filter method by ERD Laboratory