

RQ- 2019-03-11-46

Log-in Checklist

Login Station ID: #5Shipping Method: FedEx | UPS | HD | GreyhoundDate/Time of Receipt: 3/15/19 @ 9:55

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	
<u>0.8</u>			<u>10</u>		<u>✓</u>			<u>4751 8777 3384</u>
<u>0.9</u>			<u>8</u>		<u>✓</u>			<u>4751 8777 3395</u>

* 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 3.15.19

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: HK

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		<u>✓</u>	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: HK

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

Coolers Unpacked/Checked by: KK Date: 3/15/19

NCRs (Y/N)? N

Event ID: Minnie / Silver / Chain / Gleason
CEN-DIST-2019-03-15-01 (SMP)

NCR #

Date Received: 15-MAR-2019 09:55

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_05-2018
pH Paper 0.0 – 3.0 Lot #	
pH Paper 0 – 13 Lot #	222516EXP:9/15/19
Chlorine Test Strips Lot #	091417V EXP:9/2021

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: Mike Drennan / Leif Boman

Field Report Prepared By: Mike Drennan

Sampling Agency: FDEP-CEROC

Location F WIN ID / Field ID → Three Island Lake @ Center of South Lobe Li G2CE0085 ☐ dms	☐ Comp ☒ Grab Collection (comp begin or grab) Date 3/14/19 Time 955 Matrix (type, e.g., Salt, Fresh, etc) Fresh Temp (C) 21.8 pH 5.60 Diss. Oxygen 7.25 Sample Depth 0.3 Salinity (ppt) dd dms	☒ Eastern ☐ Central Composite end Date Time mg/L % sat Total Res. Chlorine (mg/L) Sp. Conductance (umho/cm) 106.5 Bottle Group(s) (See pg 2) B
Location Fi WIN ID / Field ID → Lake Gleason @ Center W G2CE0114 ☐ dms	☐ Comp ☒ Grab Collection (comp begin or grab) Date 3/14/19 Time 1047 Matrix (type, e.g., Salt, Fresh, etc) Fresh Temp (C) 22.0 pH 6.61 Diss. Oxygen 5.56 Sample Depth 0.3 Salinity (ppt) dd dms	☒ Eastern ☐ Central Composite end Date Time mg/L % sat Total Res. Chlorine (mg/L) Sp. Conductance (umho/cm) 172.3 Bottle Group(s) B
Location Fie WIN ID / Field ID → Lake Minnie @ Center Wli G2CE0108 ☐ dms	☐ Comp ☒ Grab Collection (comp begin or grab) Date 3/14/19 Time 1145 Matrix (type, e.g., Salt, Fresh, etc) Fresh Temp (C) 22.7 pH 6.66 Diss. Oxygen 8.52 Sample Depth 0.3 Salinity (ppt) dd dms	☒ Eastern ☐ Central Composite end Date Time mg/L % sat Total Res. Chlorine (mg/L) Sp. Conductance (umho/cm) CD-ERD-EC sent to overflow A
Location Fie WIN ID / Field ID → Silver Lake @ Center Wli G2CE0122 ☐ dms	☐ Comp ☒ Grab Collection (comp begin or grab) Date 3/14/19 Time 1226 Matrix (type, e.g., Salt, Fresh, etc) Fresh Temp (C) 23.2 pH 6.70 Diss. Oxygen 8.88 Sample Depth 0.3 Salinity (ppt) dd dms	☒ Eastern ☐ Central Composite end Date Time mg/L % sat Total Res. Chlorine (mg/L) Sp. Conductance (umho/cm) 246.7 Bottle Group(s) B

Relinquished By: Mike Drennan	Date/Time 3/14/2019	Shipping Method FedEx	Number of Coolers Shipped: 1	Received By: KH	Date/Time 3.15.19/9:55
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Group: A	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: A	Bottle Type:	P-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1 *Sent to ERD over flow Id
	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:	QPCR-P-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	PCR-FILTER						
Group: A	Bottle Type:	BG-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	W-E8321-DI W-E8321-MS						
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						
	H2SO4 LOT# SA8197090 EXP: 07/16/2019						
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-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC						

Group: B	Bottle Type:	P-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	W-TDS						
	W-TSS						
Group: B	Bottle Type:	BP-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	CHLSUITE-W						
Group: B	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	3
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
					H2SO4 LOT# SA8197090 EXP: 07/16/2019		
Group: B	Bottle Type:	P-125ML	# of Bottles: 3	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	3
	W-PO4-F						

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

[illegible]

CUSTODY TRANSFERS				Method of Shipment:		Received in Cooler: ☒ Y ☐ N		pH Checked in Laboratory	
RELINQUISHED BY	RECEIVED BY	DATE	TIME	Delivered Directly to Lab: ☒	Cooler Temp. verification: <u>7°C</u>	Temp. Blank Provided ☐ Y ☒ N	(< 2 s.u.): ☐ Y ☒ N		
1. Mike Drennan	<i>[Signature]</i>	3/14/19	14:22	Shipped By FedEx: _____	Temperature Blank Cooler #1: _____°C	Sulfuric Acid: Lot # _____			
2.				UPS: _____	Temperature Blank Cooler #2: _____°C	Chlorine Check			
				Other: _____	Temperature Blank Cooler #3: _____°C	(< 0.1 mg/l): ☐ Y ☒ N			

COMMENTS:

B39585

Date of Request: 21-FEB-2019
 Created By: LINGER_M On: 21-FEB-2019
 Modified By: JASROTIA_P On: 26-FEB-2019
 Customer: CEN-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Central District
 Sampling Event: Minnie / Silver / Chain / Gleason

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: 25-FEB-2019
 Biology Request Reviewed By: JASROTIA_P On: 26-FEB-2019
 Sampling Kit Required: YES Ship on: 01-MAR-2019
 Sampling Kit Shipped: YES On: 28-FEB-2019
 Sampling Kit Packed By: KLUG_K
 Preservatives Needed: NO
 Date to Receive Samples: 11-MAR-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: Minnie
 B: Silver / Chain / Gleason

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: QPCR-P-500ML	Number of Bottles: 1	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: 1	Preserved With: ICE
W-E8321-DI	Template: DEFAULT	(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 Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H ₂ SO ₄
W-NH ₃	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO ₂ NO ₃	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 Group A (Water) With 1 Samples:

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 3 Samples:

Bottle Type: P-500ML	Number of Bottles: 3	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: 3	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 Type: P-1L	Number of Bottles: 3	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: 3	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

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

Cooler Packing Worksheet for Request: RQ-2019-03-11-46

Minnie / Silver / Chain / Gleason

Ship Cooler On: 3/1/2019

Customer/Project: CEN-DIST/SMP

Assigned To: KLUG_K

Requester: Michael Linger

Priority: 3

407-894-4180
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767

Attn: Michael Linger

Comments:

No preservatives needed.

A: Minnie

B: Silver / Chain / Gleason

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1

Preservation: ICE

Lot # 00073319

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

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)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: P-250ML-WI-THI

Qty: 1

Preservation: ICE

Lot # L18307

Description: 250 ml Sterilized with tablet

Analysis

CD-ERD-EC

Description

Escherichia coli by membrane filter method by ERD Laboratory

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 1246281

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: QPCR-P-500ML

Qty: 1 Preservation: ICE

Lot # 00071457

Description: 500ml Sterile Nalgene

Affix PCR Instruction Label to container

Analysis

PCR-FILTER

Description

Preparation of Samples by Filtration and held for qPCR Analysis

Container ID: BG-500ML

Qty: 1 Preservation: ICE

Lot # 00072998

Description: Brown Glass Bottle 500ML

Affix BLUE dot to container.

Analysis

W-E8321-DI

W-E8321-MS

Description

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 00073297

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: FILTER-ICE

Lot # 00072954

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: 3

Container ID: P-1L

Qty: 3 Preservation: ICE

Lot # 00073319

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

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)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 3 Preservation: ICE

Lot # 1246281

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-500ML

Qty: 3 Preservation: ICE And H2SO4

Lot # 00073297

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: FILTER-ICE

Lot # 00072959

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By: kh Number of Coolers: 1 Date: 2.28.19

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☒ FedEx Bills, if applicable
- ☒ Plastic Bags/Zip Ties
- ☐ Acid Labels (sets of 24)

If Preservation Included:

ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2019-03-11-46