



RQ-2020- 03-02-48
Customer: WAS-SECT
Project ID: NWQI

Collected By: **Blake Spencer & Evelyn Becerra**
 Field Report Prepared By: **Blake Spencer**
 Sampling Agency: **FDEP**

Location: Minnow Creek At Lovewood Rd

WIN ID/Field ID:



G3WA0008

Comments:

SULFURIC ACID <51%

DANGER
7664-88-8
7732-18-5

Contains: 1.1 H2SO4

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fumes/mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Store in corrosion resistant container with a resistant inner liner.

THERMO FISHER SCIENTIFIC
320 NORTH MAIN STREET
MIAMI, FL 33134
1-828-855-2711

Contains: 1.1 H2SO4

Lot No.: SA9203100

Expires: 07/22/20

See Safety Data Sheet (SDS)

NITRIC ACID

20-70%

DANGER
7697-37-2
7732-18-5

Contains: 1.1 HNO3

May severely irritate, oxidize. May be corrosive to metal. Causes severe skin and eye damage. Keep away from heat/spark/open flames. No smoking. Do not breathe fumes/vapors. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. Wear goggles to prevent material damage. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store in a well-ventilated place. Keep container tightly sealed. Corrosive to the respiratory tract.

THERMO FISHER SCIENTIFIC
320 NORTH MAIN STREET
MIAMI, FL 33134
1-828-855-2711

Contains: 1.1 HNO3

Lot No.: NA918908

Expires: 07/08/20

See Safety Data Sheet (SDS)

Contains: 1.1 HNO3

Lot No.: NA918908

Expires: 07/08/20

See Safety Data Sheet (SDS)

Matrix: ☒ Fresh ☐ Marine

(Check one)

☒ GRAB

☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
3/17/20	0940 EST / CST	6.66	72.9	19.78	6.92	0.1	0.1	0.2	47	0.02

Central Lab please use top row for login purposes

	EST / CST									

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP	☒ Ice ☒ H2SO4*	☒ <2	1	A
	Lot # SA9203100 Exp: 07/22/2020				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☐ W-HARD	☒ Ice ☒ HNO3*	☒ <2	1	A
	Lot # NA9189080 Exp: 07/08/2020				
Filtered Nutrients (P125ML)	☒ W-P04-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # 16803885 Syringe Lot # 9240133				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-S04-IC / W-TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice		1	A
	☐ Contract Lab				
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3	☐ Ice			
	☐ PCR-GULL2 ☐ PCR-GFD ☐ See Notes				
Tracers (BG-500ML)	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice		1	A
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ W-E8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R	☐ Ice			
	☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)				

Name:

Signature:

Date:

Blake Spencer

Blake

3/17/20

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

WIN Station Name: Minnow Creek At Lovewood Rd

Date: 3/17/2020

(mm/dd/yyyy)

WIN/ Field ID: G3WA0008

WBID: 130

Latitude: 30.83682

(Decimal Degrees)

County: Jackson

ORG ID: 21FLWQA

Longitude: -85.52943

(Decimal Degrees)

Receiving Body of Water: Alligator Creek

RQ-2020- U3-U2-48

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Blake Spencer	X	X	X	X	X
Evelyn Becerra		X	X	X	X

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
☒ Syringe	☐ Pole
☐ Dipper	☐ Other
Depth Measured with <u>Meter Stick</u>	
Equipment ID	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded		Meter ID# <u>Biology #2</u>	
Photos: Yes / <u>No</u>	Flow: No Flow / <u>Flowing</u> / NA	Tide: Rising/ Falling/ Slack/ <u>NA</u>	Tide Times: High <u>NA</u> Low <u>NA</u>
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS LVI Other:			
SBIO ID Numbers:	SBIO-ID:	HA-ID:	RPS-ID: Macrophyte-ID: LIMS#:
Notes:			

Duplicate Sample

Time Zone: <u>EST</u> CEN Time: _____	Field ID: _____ (WIN ID_DUP)
WIN DMT Activity ID: _____	

Blank

Time Zone: <u>EST</u> CEN Time: _____	Field ID: _____ (Blank Type_DDDMMYYY)
DI Source: _____	Location: _____
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank	Equipment ID: _____

LIMS EVENT ID: WAS-SECT-2020-03-17-01

WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: ARR 3/26/20

(Initials/Date)

QC Station ID, Field Parameters In LIMS DMT: CM 3/27/20

(Initials/Date)

Scan/Save Field Sheets CM 3/27/2020

(Initials/Date)

Migrate Data to WIN: _____

(Initials/Date)

Verify Data In WIN: _____

(Initials/Date)

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

Boldly "X" this box if there are qualified data on this page.

Meter ID: Bio/03V #2

RQ: 2020-03-02-48

Project: NWQI

- Notes: (1) Always wait for meter to stabilize before recording any readings.
 (2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	B. Spencer	3/17/20	0722	20.63	760	9.985	9.99	100.1	54.3	-	P/F	L/F
ICV	B. Spencer	3/17/20	0723	20.65	760	9.968	9.99	100.2	53.3	-	P/F	L/F
CCV	B. Spencer	3/17/20	1537	22.33	760	9.693	9.920	102.5	49.2	-	P/F	L/F
CCV											P/F	L/F

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 (Pro DSS 0.75 to 1.50); 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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	B. Spencer	3/17/20	0725	191120A	12/2020	1000	1000	P/F	L/F
ICV	B. Spencer	3/17/20	0726	191120A	12/2020	1000	1000	P/F	L/F
CCV	B. Spencer	3/17/20	1539	2908CB1	09/2021	100	102	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	B. Spencer	3/17/20	0730	190618B	12/2020	7.02	20.68	7.02	-42.7	P/F	L/F
Calibr.	B. Spencer	3/17/20	0733	200221A	09/2021	4.00	20.77	4.00	129.9	P/F	L/F
Calibr.	B. Spencer	3/17/20	0737	190618C	12/2020	10.05	20.76	10.04	-212.0	P/F	L/F
ICV	B. Spencer	3/17/20	0739	190618C	12/2020	10.05	20.89	10.05	-212.3	P/F	L/F
CCV	B. Spencer	3/17/20	1541	200221A	09/2021	4.00	20.69	3.99	129.4	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Blake Spencer	3/17/20	0742	0.00	0.00	P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: WAS-SECT

Requester: Curtis Musson

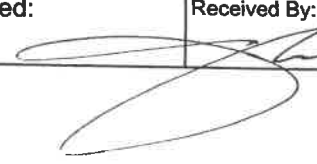
Field Report Prepared By: Evelyn Becerra

Project ID: NWQI

Collected By: Blake Spencer & Evelyn Becerra

Sampling Agency: FDEP

Location	Location: Minnow Creek At Lovewood Rd		☐ Comp	Collection (comp begin or grab)	Eastern	Composite end	Bottle Group(s) (See pg 2) A	
Field ID			☒ Grab	Date 03/17/2020 Time 0940	Central	Date - Time -		
WIN/STORE	WIN ID/Field ID:  G3WA0008		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 72.9	☐ mg/L ☒ % sat		Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C) 19.78	pH 6.92	Sample Depth 0.1		Sp. Conductance (umho/cm) 47
Location	Location: Alligator Creek Upstream Of Sr 273		☐ Comp	Collection (comp begin or grab)	Eastern	Composite end	Bottle Group(s) A	
Field ID			☒ Grab	Date 03/17/2020 Time 1010	Central	Date - Time -		
WIN/STORE	WIN ID/Field ID:  G3WA0005		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 70.3	☐ mg/L ☒ % sat		Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C) 20.17	pH 6.77	Sample Depth 0.2		Sp. Conductance (umho/cm) 51
Location	Location: Little Alligator Creek At SR 273		☐ Comp	Collection (comp begin or grab)	Eastern	Composite end	Bottle Group(s) B	
Field ID			☒ Grab	Date 03/17/2020 Time 1120	Central	Date - Time -		
WIN/STORE	WIN ID/Field ID:  G3WA0006		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 64.4	☐ mg/L ☒ % sat		Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C) 20.9	pH 5.73	Sample Depth 0.15		Sp. Conductance (umho/cm) 59
Location	Location: Scurlock Creek At Pilgrim Rd		☐ Comp	Collection (comp begin or grab)	Eastern	Composite end	Bottle Group(s) B	
Field ID			☒ Grab	Date 03/17/2020 Time 1150	Central	Date - Time -		
WIN/STORE	WIN ID/Field ID:  G3WA0009		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 71.3	☐ mg/L ☒ % sat		Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C) 20.38	pH 5.54	Sample Depth 0.15		Sp. Conductance (umho/cm) 43

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Evelyn Becerra	3/17/2020 3:26	Hand delivery	3		3/17/2020 1528

Group: B	Bottle Type: P-1L	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab
	W-F			6
	W-SO4-IC			
	W-TDS			
	W-TSS			
Group: B	Bottle Type: BP-1L	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab
	CHLSUITE-W			6
Group: B	Bottle Type: P-250ML-WO-THI	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab
	ECOLI-18QT			6
Group: B	Bottle Type: BG-500ML	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab
	W-E8321-DI			6
	W-E8321-MS			
Group: B	Bottle Type: P-500ML	# of Bottles: 6	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3			6
	W-NO2NO3			
	W-S-A-TP			
	W-TKN			
	W-TOC			
		H2SO4 LOT# SA9203100 EXP: 07/22/2020		
Group: B	Bottle Type: P-125ML	# of Bottles: 6	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab
	W-PO4-F			6

Cooler Packing Worksheet for Request: RQ-2020-03-02-48

NWQI - Alligator Creek

Ship Cooler On: 2/27/2020

Customer/Project: WAS-SECT/NWQI

Assigned To: REYNOLDS_T

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

Group A: Nutrients, Metals, E. coli, Tracers X 2

Group A: Minnow Creek & Alligator Creek Upstream Of SR 273

Group B: Nutrients, E. coli, Tracers x 6

Packing Notes:

No FedEx labels

No Trash Bags

No Bubblewrap

2 - cases of sulfuric acid/2 sets of labels

Requested Analyses:

Bottle Group: A

of Sites: 2

Container ID: P-1L

Qty: 2

Preservation: ICE

Lot # 00076335

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 (not valid for NPDES monitoring)

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: 2

Preservation: ICE

Lot # 1768968

Description: Brown Plastic Bottle 1L

Analysis

Description

Container ID: P-250ML-WO-THI

Qty: 2 Preservation: ICE

Lot # 019125

Description: 250 ml Sterilized no tablet

Analysis

ECOLI-18QT

Description

Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

Container ID: BG-500ML

Qty: 2 Preservation: ICE

Lot # 00076025

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: 2 Preservation: HNO3

Lot # 00076610

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-HARD

W-ICP

W-ICPMS

Description

Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3

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: 2 Preservation: ICE And H2SO4

Lot # 00076610

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: 2 Preservation: FILTER-ICE

Lot # 00075961

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: 6****Container ID: P-1L****Qty: 6 Preservation: ICE****Lot # 06076335****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 (not valid for NPDES monitoring)

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: 6 Preservation: ICE****Lot # 1268908****Description: Brown Plastic Bottle 1L****Analysis**

CHLSUITE-W

Description

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

Container ID: P-250ML-WO-THI**Qty: 6 Preservation: ICE****Lot # 119125****Description: 250 ml Sterilized no tablet****Analysis**

ECOLI-18QT

Description

Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

Container ID: BG-500ML**Qty: 6 Preservation: ICE****Lot # 06076025****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: 6 Preservation: ICE And H2SO4****Lot # 06076610****Description: Plastic Bottle 500 mL**

Affix YELLOW sulfuric acid dot to container.

Analysis**Description**

W-NH3
W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

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: 6 Preservation: FILTER-ICE

Lot # 00675961

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Cooler Packed By: TLK

Number of Coolers: 3

Date: 02/26/2020

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 <u>SA</u>	Exp <u>10/20/20</u>	Lot # <u>9354050</u>
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2020-03-02-48