

(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/agv #2

RQ: 2019-03-25-19

Project: WQT

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	3/27/19	0732	19.91	760	9.111	9.11	100	53.3	—	P/F	L/F
ICV	1	3/27/19	0735	19.89	760	9.111	9.11	99.9	53.3	—	P/F	L/F
CCV	B. Spencer	3/27/19	1646	21.90	760	8.761	8.71	99.4	46.1	—	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	B. Spencer	3/27/19	0741	180221A	03/2019	500	500	P/F	L/F
ICV	1	3/27/19	0743	180221A	03/2019	500	501	P/F	L/F
CCV	B. Spencer	3/27/19	1648	1805F81	05/2020	100	104	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	3/27/19	0747	180403C	10/2019	7.02	20.48	7.02	-18.2	P/F	L/F
Calibr.	1		0750	180621D	07/2019	4.00	20.44	4.00	155.7	P/F	L/F
Calibr.	1		0755	180621F	01/2020	10.05	20.48	10.03	-187.9	P/F	L/F
ICV	1		0757	180621F	01/2020	10.05	20.47	10.03	-187.2	P/F	L/F
CCV	B. Spencer	3/27/19	1654	180621D	07/2019	4.00	20.21	3.99	155.5	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	B. Spencer	3/27/19	0756	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

Requester: Curtis Musson

Collected By: Blake Spencer April Wood-McGrath

Field Report Prepared By: April Wood-McGrath
Sampling Agency: IDEP

last revised Jan 25, 2016

Location	WIN ID / FILED ID → G3WA0006 Little Alligator Creek at SR 273	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 3/27/19 Time 11:15	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 91.6	Composite end Date — Time —	Bottle Group(s) (See pg 2) C
Field ID	Latitude 30.88873 Longitude -85.46802	Temp (C) 16.10 pH 6.79	Salinity (ppt) 0.04	Sample Depth 0.2	% sat (mg/L) —	Sp. Conductance (umho/cm) 87	
WIN/STORET #	Location	dd dms	dd dms	Comments	ft m		
Field ID	WIN ID / FILED ID → G3WA0009 Scurlock Creek at Highway Rd	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 3/27/19 Time —	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen	Composite end Date — Time —	Bottle Group(s) A
Latitude 30.8545 Longitude -85.4443	Temp (C) — pH —	Salinity (ppt) —	Sample Depth —	% sat (mg/L) —	Sp. Conductance (umho/cm) —		
WIN/STORET #	Location	dd dms	dd dms	Comments	ft m		
Field ID	WIN ID / FILED ID → G3WA0008 Minnow Creek At Lovewood Rd	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 3/27/19 Time 10:15	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 78.6	Composite end Date — Time —	Bottle Group(s) A
Latitude 30.83682 Longitude -85.52943	Temp (C) 15.33 pH 6.10	Salinity (ppt) 0.02	Sample Depth 0.1	% sat (mg/L) —	Sp. Conductance (umho/cm) 47		
WIN/STORET #	Location	dd dms	dd dms	Comments	ft m		
Field ID	WIN ID / FILED ID → G3WA0005 Alligator Creek Upstream of SR 273	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 3/27/19 Time 12:50	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 88.6	Composite end Date — Time —	Bottle Group(s) B
Latitude 30.819 Longitude -85.5042	Temp (C) 16.77 pH 6.12	Salinity (ppt) 0.02	Sample Depth 0.2	% sat (mg/L) —	Sp. Conductance (umho/cm) 50		
WIN/STORET #	Location	dd dms	dd dms	Comments	ft m		

Disinquired By: [Signature]

Date/Time: 3/27/19 1638

Shipping Method: Hand Delivered

Number of Coolers Shipped: 3

Received By: Tyler R.

Date/Time: 03/27/19 @ 4:38 pm

Request Number: RQ-2019-03-25-19

NWQI - Alligator Creek

Florida Department of Environmental Protection Central Laboratory Submittal Form

Page 1 of 4

last revised Jan 25, 2018

Customer: WAS-SECT

Project ID: SMP

Requester: Curtis Musson

Field Report Prepared By: Blake SpencerCollected By: Blake Spencer & Avril Wood-McGeeSampling Agency: FDEP

Location		WIN ID / FILED ID → 	☐ Comp	Collection (comp begin or grab)		☒ Grab	Date <u>3/27/19</u>	Time <u>14:25</u>	☒ Eastern	Composite end	Bottle Group(s)
Field ID		G3WA0013									
WIN/STORET #	Location			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L	Total Res. Chlorine	☒ % sat	(mg/L)		
		Unnamed Creek at Palmview Rd		<u>Fresh</u>	<u>12.43</u>						
Latitude	☒ dd	Longitude	☒ dd	Temp (C)	pH	Sample Depth	☐ ft	Sp. Conductance	(umho/cm)		
<u>30.812154</u>		<u>-85.454192</u>		<u>22.62</u>	<u>6.10</u>	<u>0.1</u>	☒ m	<u>42</u>			
Location				Salinity (ppt)	Comments						
				<u>0.02</u>							
Location											
WIN ID / FILED ID → 											
Field ID											
WIN/STORET # Location 											
Pine Barn Creek at Woodrest Rd											
Latitude <u>30.8358</u> ☒ dd ☐ dms Longitude <u>-85.4488</u> ☒ dd ☐ dms											
Temp (C) <u>16.80</u> pH <u>6.23</u> Sample Depth <u>0.1</u> ☐ ft ☒ m Sp. Conductance <u>76</u> (umho/cm)											
Salinity (ppt) <u>0.04</u> Comments <u>Crossed out because Pine Barn creek not sampled.</u>											
Location											
WIN ID / FILED ID → 											
Field ID											
WIN/STORET # Location 											
Alligator Creek upstream of Bentley Rd.											
Latitude <u>30.8735</u> ☒ dd ☐ dms Longitude <u>-85.4723</u> ☒ dd ☐ dms											
Temp (C) <u>16.80</u> pH <u>6.23</u> Sample Depth <u>0.1</u> ☐ ft ☒ m Sp. Conductance <u>76</u> (umho/cm)											
Salinity (ppt) <u>0.04</u> Comments											
Location											
WIN ID / FILED ID → 											
Field ID											
WIN/STORET # Location 											
Unnamed Creek at Woodrest Rd											
Latitude <u>30.80689954</u> ☒ dd ☐ dms Longitude <u>-85.46034058</u> ☒ dd ☐ dms											
Temp (C) <u>19.06</u> pH <u>5.57</u> Sample Depth <u>0.1</u> ☐ ft ☒ m Sp. Conductance <u>33</u> (umho/cm)											
Salinity (ppt) <u>0.01</u> Comments											

Relinquished By: 	Date/Time: <u>3/27/19 1638</u>	Shipping Method: <u>Hand Delivered</u>	Number of Coolers Shipped: <u>3</u>	Received By: 	Date/Time: <u>03/27/19 @ 4:38</u>
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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:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ECOLI-18QT						
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:	CH2CICOOH Pre-Preserved	Enter Number of Bottles Sent to Lab	1
	W-CARB-AA						
Group: A	Bottle Type:	BG-500ML	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
	W-CT-CI-R W-PCL-SQ-R						
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:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP W-ICPMS LOT# NA 8344050 Exp: 12/10/19						
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# SA8274050 EXP: 10/01/2019						

Group: A	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-PSNP-TQ	BG-1L	# of Bottles: 4	Preservative: ICE	Enter Number of Bottles Sent to Lab	4
Group: B	Bottle Type: ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS	P-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: ECOLI-18QT	P-250ML-WO-THI	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: PCR-BACR PCR-HF183	QPCR-P-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-E8321-DI W-E8321-MS	BG-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-ICP W-ICPMS	P-500ML	# of Bottles: 1	Preservative: HNO3 LOT#: NA 8344050 EXP: 12/10/19	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4 H2SO4 LOT#: SA8274050 EXP: 10/01/2019	Enter Number of Bottles Sent to Lab	1

Group: B	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
Group: C	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS	Bottle Type: P-1L	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>4</u>
Group: C	CHLSUITE-W	Bottle Type: BP-1L	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>4</u>
Group: C	ECOLI-18QT	Bottle Type: P-250ML-WO-THI	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>4</u>
Group: C	PCR-BACR PCR-HF183	Bottle Type: QPCR-P-500ML	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>4</u>
Group: C	W-E8321-DI W-E8321-MS	Bottle Type: BG-500ML	# of Bottles: 6	Preservative: ICE	Enter Number of Bottles Sent to Lab	<u>4</u>
Group: C	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	Bottle Type: P-500ML	# of Bottles: 6	Preservative: ICE And H2SO4 H2SO4 LOT# SA8274050 EXP: 10/01/2019	Enter Number of Bottles Sent to Lab	<u>4</u>
Group: C	W-PO4-F	Bottle Type: P-125ML	# of Bottles: 6	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	<u>4</u>

Cooler Packing Worksheet for Request: RQ-2019-03-25-19

NWQI - Alligator Creek

Ship Cooler On: 3/21/2019

Customer/Project: WAS-SECT/SMP

Assigned To: REYNOLDS_T

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Please return
packing list with
sample submittal
forms.

Comments:

No preservatives needed.

Group A: Nutrients, Metals, PCR-FILTER, Pesticides, E. coli *Minnow Creek @ Love wood Rd.*
WBID 130 Minnow Creek ✓

Group B: Nutrients, Metals, PCR (HF183, BacR), Tracers, E. coli
WBID123. Alligator Creek at SR 273 ✓

Group C x 6
Nutrients, PCR (HF183, BacR), Tracers, E. coli
WBIDs 123x2, 195, 233A, 235, 262A ✓

Packing Notes:

No FedEx labels

No Trash Bags

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Description: Plastic Bottle 1L

Lot # 00073369

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-500ML

Qty: 1

Preservation: HNO3

Lot # 00073297

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-ICP

W-ICPMS

Description

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: 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

Container ID: BG-1L

Qty: 4

Preservation: ICE

Lot # 00073521

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-PSNP-TQ

Description

Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Bottle Group: B

of Sites: 1

Container ID: P-1L

Qty: 1

Preservation: ICE

Lot # 00073319

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

Description

Alkalinity in aqueous matrices as mg CaCO3/L

Turbidity in aqueous matrices

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: C# of Sites: 6

Container ID: P-1L

Qty: 6

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: 6

Preservation: ICE

Lot # 1243571

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Cooler Packed By: Tyler R.

Number of Coolers: 4

Date: 03/20/19

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-2019-03-25-19