

Field Sheets Scanned/Saved: DT 9/27/17 (Initials/Date)

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

Boldly "X" this box if there is qualified data on this name.

Meter ID: Biology #2

RQ: 2017-09-11-17

Project: BMAP

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.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	9/26/17	657	21.96	8.744	8.75	100.0	52	—	P/F	L/F
ICV	Curtis Musson	9/26/17	658	21.94	8.761	8.76	100.0	52	—	P/F	L/F
CCV	Curtis Musson	9/26/17	1455	23.53	8.498	8.51	100.1	52	—	P/F	L/F
CCV										P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

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.	Curtis Musson	9/26/17	700	170310D	03/2018	1000	1000	P/F	L/F
ICV	Curtis Musson	9/26/17	701	170310D	03/2018	1000	1000	P/F	L/F
CCV	Curtis Musson	9/26/17	1457	170614D	6/2018	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	9/26/17	702	170310B	9/2018	7.0	7.00	35	P/F	L/F
Calibr.	Curtis Musson	9/26/17	704	170614A	6/2018	4.01	4.01	206	P/F	L/F
Calibr.	Curtis Musson	9/26/17	706	170310C	9/2018	10.01	9.96	-120	P/F	L/F
ICV	Curtis Musson	9/26/17	707	170310C	9/2018	10.01	9.93	-118	P/F	L/F
CCV	Curtis Musson	9/26/17	1454	170310B	9/2018	7.00	7.01	40.5	P/F	L/F
CCV									P/F	L/F

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

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

mV pH 10 Range -180 $\pm$ 50;

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

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth 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	Curtis Musson	9/26/17	709	0.000	0.000	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 Lab Sample Submittal Form

Collected By: Curtis Musson, Ben Rains

Loc: **STORRET →**
 Merritt's Mill Pond
 500 meters upstream of dam
 G2W.A0000

Field IC →
 Merritt's Mill Pond
 500 meters upstream of dam
 Sept 26, 2017
 G2W.A0000 09262017

Loc: **STORRET ↓**
 Merritt's Mill Pond
 mid under powerlines
 G1W.A0000

Field IC →
 Merritt's Mill Pond
 mid under powerlines
 Sept 26, 2017
 G2W.A0000 09262017

Field IC →
 Merritt's Mill Pond
 600 meters downstream of Jackson Blue Spring
 G1W.A0007

Field IC →
 Merritt's Mill Pond
 600 meters downstream of Jackson Blue Spring
 Sept 26, 2017
 G2W.A0007 09262017

Field IC →
 Merritt's Mill Pond
 600 meters downstream of Jackson Blue Spring
 Sept 26, 2017
 G2W.A0007 09262017

Field IC →
 Merritt's Mill Pond
 600 meters downstream of Jackson Blue Spring
 Sept 26, 2017
 G2W.A0007 09262017

Relinquished By: Curtis Musson
 Date/Time: 9-26-17 / 1240
 Number of Coolers: 1
 Received By: [Signature]
 Date/Time: 9-26-17 / 12:40

Collection (comp begin or grab) Date: 9-26-17 Time: 930
 Matrix (Salt, Fresh): Fresh
 Temp (C): 26.05
 pH: 8.55
 Salinity (ppt): 0.13
 Latitude (Decimal Degrees): 30.755
 Longitude (Decimal Degrees): -85.1881
 Bottle Group(s): A

Collection (comp begin or grab) Date: 9-26-17 Time: 950
 Matrix (Salt, Fresh): Fresh
 Temp (C): 24.36
 pH: 7.71
 Salinity (ppt): 0.13
 Latitude (Decimal Degrees): 30.7698
 Longitude (Decimal Degrees): -85.1731
 Bottle Group(s): A

Collection (comp begin or grab) Date: 9-26-17 Time: 10:10
 Matrix (Salt, Fresh): Fresh
 Temp (C): 20.74
 pH: 7.15
 Salinity (ppt): 0.13
 Latitude (Decimal Degrees): 30.787
 Longitude (Decimal Degrees): -85.1459
 Bottle Group(s): A, B

Collection (comp begin or grab) Date: 9-26-17 Time: 10:10
 Matrix (Salt, Fresh): Fresh
 Temp (C): 20.74
 pH: 7.15
 Salinity (ppt): 0.13
 Latitude (Decimal Degrees): 30.787
 Longitude (Decimal Degrees): -85.1459
 Bottle Group(s): A, B

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Group: A	Bottle Type:	P-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3 of 3
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3 of 3
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	3 of 3
	W-ICP						
	W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 3	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	3 of 3
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 3	Preservative:	ICE-FLTR	Enter Number of Bottles Sent to Lab	3 of 3
	W-PO4-F						
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1 of 1
	ALGAL_ID						

Cooler Packing Worksheet for Request: RQ-2017-09-11-17

Merrits Mill Pond BMAP

Ship Cooler On: 8/28/2017

Customer/Project: WAS-SECT/BMAP

Assigned To: GREENWOOD_J

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Freshwater Kit With Metals

Group B: Algal ID

Requested Analyses:

Bottle Group: A

of Sites: 3

Container ID: P-1L

Qty: 3 Preservation: ICE

Lot # 05068657

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

Container ID: BP-1L

Qty: 3 Preservation: ICE

Lot # 1196409

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: HNO3

Lot # 00068654

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: 3 Preservation: ICE And H2SO4

Lot # 00068654

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: ICE-FLTR

Lot # 00067688

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: 1

Container ID: PT-50ML

Qty: 1 Preservation: ICE

Lot # 03715003

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Cooler Packed By:

JD.

Number of Coolers:

1

Date:

8/30/17

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☐ FedEx Bills, if applicable
- ☒ Plastic Bags
- ☒ Zip Ties

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2017-09-11-17