

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: Stitch RQ: 2022-11-28-15 Project: BMAP2

- 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 11/14/22

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.	Brian Davis	12/6/22	812	21.2	765.8	8.9	/	100.8	/	1.07	P/F	L/F
ICV			815	21.2	765.9	8.9	9.01	101.5	/	1.07	P/F	L/F
CCV			1409	22.8	765.5	8.7	8.68	100.9	/	1.07	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.	Brian Davis	12/6/22	742	220719A	7/23	1000	1000	P/F	L/F
ICV			748	210917A	3/23	100	100.6	P/F	L/F
CCV			1412	211122A	12/22	15000	15101	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.	Brian Davis	12/6/22	756	M118-15	5/24	7.02	20.9	7.02	-33.8	P/F	L/F
Calibr.			805	L344-18	12/23	4.00	21.2	4.00	140.3	P/F	L/F
Calibr.			806	M103-01	4/24	10.04	21.0	10.04	-206.8	P/F	L/F
ICV			808	M118-15	5/24	7.02	20.9	7.03	-33.7	P/F	L/F
CCV			1416	M103-01	4/24	7.01	21.7	10.03	-207.0	P/F	L/F
CCV						10.03				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 10 173.0, slope from 4 to 7 174.1 (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: 11/14/22

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	Brian Davis	12/6/22	814	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:



CHAIN OF CUSTODY RECORD

Project Number:
(Lab Use Only)

3653 Regent Boulevard, Suite # 509
Jacksonville, FL 32224
P. (904) 807-9625 E. info@delllab.com
F. (904) 807-9627

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Company Name		Florida Department of Environmental Protection	
Address		8800 Baymeadows Way West	
City	Jacksonville	State	FL
		Zip	32256
Attn.		Dep-overflowmicro@fldep.state.fl.us	
Tel.		E-mail or Fax	
Project Name		BMAP 2	
Project Number		2022-11-28-15	
Project Location			
Sampler Name/Signature			
Transfer #	Sample # (Lab Use Only)	Sample Identification	Date Sampled
1		20030726	12/6/22
2		20030897	940
3		20030123	1005
4		20030753	1020
5		20030653	1115
6		2003848	1115
7			
8			
9			
0			
Special Instructions: X10 Dilution = *			
Transfer Numbers		Relinquished By	Date / Time
1-6			12/16/22 1305
Received By		Date / Time	
		12/16/22 1305	
Container Information (Qty, Size, & Type)			
NPW			
NPW			
NPW			
Container Preservation Codes			
6 6 6			
Parameters			
E. Coli - Quantitray			
Enterococci - Quantitray			
Coliform, Fecal - MF 3 Dilutions			
Sample Matrix Codes:			
A. Air P. Petroleum			
B. Bulk S. Soil/Sediment			
W. Wipe O. Other			
PW. Potable Water			
NPW. Non-Potable Water			
Sample Kit or Container Lot #			
NPW			
Preservation Codes:			
0. None 5. Na2S2O3			
1. H2SO4 6. Crushed Ice (4C)			
2. HNO3 7. C6H8O6			
3. HCl 8. NH4Cl			
4. NaOH 9. Other (List)			
Thermal Preservation:			
In Crushed Ice? ☒ Yes ☐ No			
Cooler Temp: 0.7 °C			
Sample Cont. Temp: 1.3 °C			
Turnaround Requested:			
X. Standard (10 Business Days)			
Semi-Rush (3-5 Business Days)			
Rush (1-2 Business Days)			
Turnaround times are estimated & subject to change. Surcharges apply for all Rush samples.			
Billing Information:			
Invoice with Report			
Invoice to Accounting			
Req. #:			
P.O. #:			



Form 059, Rev. 01, Rev. Date: 02/07/22, Effective Date: 02/07/22

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	TERRAPIN CREEK AT FAYE ROAD				Sample Date:	12/6/2022	
WIN / Field ID:	20030653	ORG ID:	21FLA	ENR:	-		
County:	Duval	WBID:	2204	STREAM	3F		
Receiving Body of Water:	Dunn Creek				RQ-	2022-11-28-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x Pole	Na
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
	Wading	Canoe/Kayak	
x	From Shore	Electric Motor	
		Gasoline Motor	
Depth Measured With Meter			

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	No
Meter ID:	Stitch
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1115	0.1	0.05	5.35	57.1	18.4	6.59	0.1	236	0.11
VOB (s)										

Biological Samples Collected: None**SBIO Visit ID:** **HA ID:** **RPS ID:** **Macrophyte ID:** **LIMS Sample ID Entered Into The Macrophyte Module:**

Parameter Suite	Parameter Methods (LIMS Test Codes)	Preservation			
		Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli Contract Lab Diversified	ICE			
Chlorophyll					
Physical/Aggregate Nutrients					
Filtered Nutrients			Syringe Lot#; Filter Lot#:		
Acid Preserved Nutrients					
Metals					
Organics (LC)					
Macroinvertebrates					
Organics (GC)					
Molecular					
Periphyton					
Phytoplankton					
BOD					
DOC			SyringeLot#	FilterLot#	
Other(s)					
Field Comments:	Iron fixing bacteria present, stagnant surface but flow beneath				
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.				
Relinquish Date:	12/06/2022	Signature:			

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: KV 12/6/22 (Initials/Date) (Initials/Date)

Migrate Data to WIN: (Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	TROUT R @ DINSMORE BOAT RAMP DOCK NR US 1				Sample Date:	12/6/2022	
WIN / Field ID:	20030123	ORG ID:	21FLA	ENR:	-	Latitude:	30.43663
County:	Duval	WBID:	2203B	ESTUARY	3M	Longitude:	-81.76118
Receiving Body of Water:	St Johns River Above Dames Point				RQ-	2022-11-28-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x Pole	Na
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
	Wading	Canoe/Kayak	
	From Shore	Electric Motor	
x	Dock	Gasoline Motor	
Depth Measured With Meter			

Water Level:	Normal
Flow:	Flowing
Matrix:	Marine
Tide Stage:	Falling
High Tide:	NA
Low Tide:	NA
Photos:	No
Meter ID:	Stitch
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1005	1.696	0.3	4.9	52.9	18.2	6.92	0.8	4750	2.53
	1007		1.196	4.92	53.1	18.2	6.93		4827	2.6

Biological Samples Collected: None

SBIO Visit ID: **HA ID:** **RPS ID:** **Macrophyte ID:** **LIMS Sample ID Entered Into The Macrophyte Module:**

Parameter Suite	Parameter Methods (LIMS Test Codes)	Preservation			
		Type	Lot#	Expiration Date	pH Check
Microbiology	Contract Lab Enterococci Diversified	ICE			
Chlorophyll					
Physical/Aggregate Nutrients					
Filtered Nutrients			Syringe Lot#; Filter Lot#;		
Acid Preserved Nutrients					
Metals					
Organics (LC)					
Macroinvertebrates					
Organics (GC)					
Molecular					
Periphyton					
Phytoplankton					
BOD					
DOC					
Other(s)					
Field Comments:	Scum on water surface				
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.				
Relinquish Date:	12/06/2022	Signature:			

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: KV 12/6/22 (Initials/Date) (Initials/Date)

Migrate Data to WIN: (Initials/Date)

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	NW TRIBUTARY TO OPEN CR AT HODGES				Sample Date:	12/6/2022	
WIN / Field ID:	20030848	ORG ID:	21FLA	ENR:	-		
County:	Duval	WBID:	2299B	STREAM	3F		
Receiving Body of Water:	ICWW Duval. St Johns County				RQ-	2022-11-28-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
	Syringe	x	Pole
			Na
	Syringe Lot#		Filter Lot#
	Secchi Equipment ID:		
Collection Method			
	Wading		Canoe/Kayak
x	From Shore		Electric Motor
			Gasoline Motor
	Depth Measured With	Meter	

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	No
Meter ID:	Stitch
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1150	0.414	0.3	7.12	78	19.7	7.01	0.414	431.7	0.21
								VOB (s)		

Biological Samples Collected: None

SBIO Visit ID: HA ID: RPS ID: Macrophyte ID: LIMS Sample ID Entered Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)	Preservation			
		Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli Contract Lab	Diversified			
Chlorophyll					
Physical/Aggregate Nutrients					
Filtered Nutrients					
Acid Preserved Nutrients					
Metals					
Organics (LC)					
Macroinvertebrates					
Organics (GC)					
Molecular					
Periphyton					
Phytoplankton					
BOD					
DOC					
Other(s)					
Field Comments:					
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.				
Relinquish Date:	12/06/2022	Signature:			

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: KV 12/6/22 Migrate Data to WIN:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	MONCRIEF CR AT MONCRIEF ROAD				Sample Date:	12/6/2022	
WIN / Field ID:	20030726	ORG ID:	21FLA	ENR:	-		
County:	Duval	WBID:	2228B	STREAM			
Receiving Body of Water:	Trout River Lower Reach				RQ-	2022-11-28-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
	Syringe	x	Pole
	Syringe Lot#		Filter Lot#
	Secchi Equipment ID:		
Collection Method			
	Wading		Canoe/Kayak
x	From Shore		Electric Motor
			Gasoline Motor
Depth Measured With Meter			

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	Falling
High Tide:	NA
Low Tide:	NA
Photos:	No
Meter ID:	Stitch
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	920	0.93	0.3	3.38	36.3	18.7	7.05	0.93	406.1	0.2
								VOB (s)		

Biological Samples Collected: None

SBIO Visit ID: HA ID: RPS ID: Macrophyte ID: LIMS Sample ID Entered Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)	Preservation			
		Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli Contract Lab	Diversified			
Chlorophyll					
Physical/Aggregate Nutrients					
Filtered Nutrients					
Acid Preserved Nutrients					
Metals					
Organics (LC)					
Macroinvertebrates					
Organics (GC)					
Molecular					
Periphyton					
Phytoplankton					
BOD					
DOC					
Other(s)					
Field Comments:	Partly cloudy, heavy scum layer across entire creek system.				
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.				
Relinquish Date:	12/06/2022	Signature:			

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: KV 12/6/22 (Initials/Date) Migrate Data to WIN: (Initials/Date)

(Initials/Date) (Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	MONCRIEF CR @ 21ST ST				Sample Date:	12/6/2022	
WIN / Field ID:	20030897	ORG ID:	21FLA	ENR:	-		
County:	Duval	WBID:	2228B	STREAM	3F		
Receiving Body of Water:	Trout River Lower Reach				RQ-	2022-11-28-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x	Pole Na
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
	Wading	Canoe/Kayak	
x	From Shore	Electric Motor	
		Gasoline Motor	
Depth Measured With Meter			

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	No
Meter ID:	Stitch
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	940	0.218	0.1	4.51	49.6	19.9	7.1	0.218	452.5	0.22
VOB (s)										

Biological Samples Collected: None

SBIO Visit ID: HA ID: RPS ID: Macrophyte ID: LIMS Sample ID Entered Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)	Preservation			
		Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli Contract Lab	Diversified			
Chlorophyll					
Physical/Aggregate Nutrients					
Filtered Nutrients					
Acid Preserved Nutrients					
Metals					
Organics (LC)					
Macroinvertebrates					
Organics (GC)					
Molecular					
Periphyton					
Phytoplankton					
BOD					
DOC					
Other(s)					
Field Comments:					
Comments on COC: Microbiology sample(s) submitted to contract laboratory.					
Relinquish Date:	12/06/2022	Signature:			

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: KV 12/6/22 (Initials/Date) Migrate Data to WIN: (Initials/Date)

(Initials/Date) (Initials/Date)

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

BASIN MANAGEMENT ACTION PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	TROUT RIVER AT OLD KINGS RD				Sample Date:	12/6/2022	
WIN / Field ID:	20030753	ORG ID:	21FLA	ENR:	-		
County:	Duval	WBID:	2203	STREAM	3F		
Receiving Body of Water:	St Johns River Above Dames Point				RQ-	2022-11-28-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katrin Villinger	x		x		
Brian Davis		x		x	x

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
	Syringe	x	Pole
	Syringe Lot#		Filter Lot#
	Secchi Equipment ID:		
Collection Method			
	Wading		Canoe/Kayak
x	From Shore		Electric Motor
			Gasoline Motor
Depth Measured With <i>Meter</i>			

Water Level:	High
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	Falling
High Tide:	NA
Low Tide:	NA
Photos:	NA
Meter ID:	Stitch
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
EST	1020	1.145	0.3	6.2	64.4	17.2	6.72	0.5	123.8	0.06

Biological Samples Collected: None**SBIO Visit ID:** **HA ID:** **RPS ID:** **Macrophyte ID:** **LIMS Sample ID Entered Into The Macrophyte Module:**

Parameter Suite	Parameter Methods (LIMS Test Codes)	Preservation			
		Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli Contract Lab Diversified	ICE			
Chlorophyll					
Physical/Aggregate Nutrients					
Filtered Nutrients			Syringe Lot#; Filter Lot#:		
Acid Preserved Nutrients					
Metals					
Organics (LC)					
Macroinvertebrates					
Organics (GC)					
Molecular					
Periphyton					
Phytoplankton					
BOD					
DOC			SyringeLot#	FilterLot#	
Other(s)					
Field Comments:					
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.				
Relinquish Date:	12/06/2022	Signature:			

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____

Save Field Sheets on Network: KV 12/6/22 (Initials/Date) Migrate Data to WIN: _____ (Initials/Date)