

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: Persi

RQ- 2021-04-05-69

Project: BMAP3/Butcher Pen

Source Tracking

- 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 2/15/21

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.	<u>Brian D.</u>	<u>4/8/21</u>	<u>747</u>	<u>21.4</u>	<u>760.9</u>	<u>8.9</u>	<u>8.9</u>	<u>100.1</u>	<u>✓</u>	<u>1.05</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>750</u>	<u>21.5</u>	<u>761.1</u>	<u>8.8</u>	<u>8.83</u>	<u>100.0</u>	<u>✓</u>	<u>1.05</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1533</u>	<u>21.4</u>	<u>759.2</u>	<u>8.5</u>	<u>8.43</u>	<u>99.0</u>	<u>✓</u>	<u>1.05</u>	<u>P/F</u>	<u>L/F</u>
CCV											<u>P/F</u>	<u>L/F</u>

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.	<u>Brian D.</u>	<u>4/8/21</u>	<u>752</u>	<u>201222B</u>	<u>1/22</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>753</u>	<u>201222A</u>	<u>1/22</u>	<u>100</u>	<u>102.7</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1535</u>	<u>201222B</u>	<u>1/22</u>	<u>1000</u>	<u>1002</u>	<u>P/F</u>	<u>L/F</u>
CCV								<u>P/F</u>	<u>L/F</u>

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.	<u>Brian D.</u>	<u>4/8/21</u>	<u>759</u>	<u>2010F27</u>	<u>10/22</u>	<u>7.01</u>	<u>22.9</u>	<u>7.01</u>	<u>-34.7</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>804</u>	<u>2010C31</u>	<u>9/22</u>	<u>4.00</u>	<u>22.8</u>	<u>4.00</u>	<u>145.4</u>	<u>P/F</u>	<u>L/F</u>
Calibr.			<u>807</u>	<u>2012197</u>	<u>5/22</u>	<u>10.02</u>	<u>22.9</u>	<u>10.03</u>	<u>-207.3</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>809</u>	<u>2010F27</u>	<u>10/22</u>	<u>7.01</u>	<u>22.9</u>	<u>7.05</u>	<u>-34.2</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1536</u>	<u>2012797</u>	<u>5/22</u>	<u>10.02</u>	<u>23.0</u>	<u>10.06</u>	<u>-210.3</u>	<u>P/F</u>	<u>L/F</u>
CCV										<u>P/F</u>	<u>L/F</u>

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	<u>Brian D.</u>	<u>4/8/21</u>	<u>811</u>	<u>0.00</u>	<u>0.00</u>	<u>P/F</u>	<u>L/F</u>

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

COMMENTS:



Florida DEP North East District ROC BMAP Field sheet

Data Pass CCV?

Yes ☒ No ☐Date: 4/8/2021 RQ#: 2021-04-05-109Event Name: Butcher Pen Tracking Meter ID: Pro DSS DesiSampling Team Members: K. McDonald, B. Davis, W. Karlavige

All bacteria samples taken are surface water grab samples.

WIN Number / Site Name BP1 Stormwater grate @ lift station 30.2599945, -81.7421651				WBID Number 2322		Matrix: Surface ☒ Fresh ☒ Surface Salt ☐		Sample Type: E. coli ☒ + 8321-D1/MS Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
				Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☐ Grate ☒		Sample Ice Preserved in 15 minutes? Yes ☒ No ☐				km		km	
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack			
1005	0.005	0.005	18.7	10.1	0.001	7.85	9.36	100.4	VOB	Ebb			
Comments and Weather: 1 e coli → COJ lab • strong sewage odor 1-8321-D1/MS → DEP lab • flow in grate not deep enough to cover probes													

WIN Number / Site Name BP2 Ditch @ Arthur Durham 30.2605731, -81.7421902				WBID Number 2322		Matrix: Surface ☒ Fresh ☒ Surface Salt ☐		Sample Type: E. coli ☒ + 8321-D1/MS Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
				Sample Access: Wading ☐ Dock ☐ From Shore ☒ Bridge ☐		Sample Ice Preserved in 15 minutes? Yes ☒ No ☐				km		km	
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack			
1032	0.01	0.01	19.2	389.3	0.19	7.35	8.98	97.4	0.01	Ebb			
Comments and Weather: 1 e coli → COJ lab • no obvious input 1 8321-D1/MS → DEP lab • stormwater conveyance • trib. to Butcher Pen													

WIN Number / Site Name BP3 Butcher Pen downstream of car camp 30.2589241, -81.7419515				WBID Number 2322		Matrix: Surface ☒ Fresh ☒ Surface Salt ☐		Sample Type: E. coli ☒ + 8321-D1/MS Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
				Sample Access: Wading ☐ Dock ☐ From Shore ☒ Bridge ☐		Sample Ice Preserved in 15 minutes? Yes ☒ No ☐				km		km	
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack			
1115	0.03	0.015	18.0	384.6	0.18	7.36	4.98	52.6	0.03	Ebb			
Comments and Weather: 1 e coli → COJ lab • downstream of observed homeless camp 1 8321-D1/MS → DEP lab													

Signature: _____ Date: _____

Field Sheet Scanned (Initials/date): _____ Parameters uploaded to LIMs (Initials/date): _____

Data QC'd in LIMs (Initials/date): _____ Data Migrated to WIN (Initials/date): _____

Revision 2/24/2020

WIN Number / Site Name 20030082 Butcher Pen Cr at Confederate 30.264590, -81.734333					WBID Number 2322		Matrix: Surface Fresh ☐ Surface Salt ☒		Sample Type: E. coli ☒ + 8321-D1/MS Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
					Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☒				Sample Ice Preserved in 15 minutes? Yes ☒ No ☐		km		km	
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack				
1216	0.35	0.16	23.1	7212	4.08	7.78	9.03	107.9	0.35	Ebb				
										VOB				
Comments and Weather: 1 ecoli → COJ lab 1 8321-D1/MS → DEP lab • observed dog poop + multiple ducks downstream														

WIN Number / Site Name 20030760 Butcher Pen Cr at Wesconnett 30.259961, -81.739879					WBID Number 2322		Matrix: Surface Fresh ☒ Surface Salt ☐		Sample Type: E. coli ☒ + 8321-D1/MS Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
					Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☒				Sample Ice Preserved in 15 minutes? Yes ☒ No ☐		km		km	
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack				
1240	1.03	0.3	18.2	356.7	0.17	7.4	5.60	60.7	1.03	Ebb				
										VOB				
Comments and Weather: 1 ecoli → COJ lab 1 8321-D1/MS → DEP lab														

WIN Number / Site Name					WBID Number		Matrix: Surface Fresh ☐ Surface Salt ☐		Sample Type: E. coli ☐ Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
					Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☐				Sample Ice Preserved in 15 minutes? Yes ☐ No ☐					
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack				
Comments and Weather:														

WIN Number / Site Name					WBID Number		Matrix: Surface Fresh ☐ Surface Salt ☐		Sample Type: E. coli ☐ Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation	
					Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☐				Sample Ice Preserved in 15 minutes? Yes ☐ No ☐					
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack				
Comments and Weather:														



Florida DEP North East District ROC BMAP Field sheet

Data Pass CCV?

Yes ☒ No ☐Date: 4/8/2021 RQ#: 2021-04-05-44Event Name: Butcher Pen BMAP I Meter ID: Pro DSS DesiSampling Team Members: K. McDonald, B. Davis, W. Karlavige

All bacteria samples taken are surface water grab samples.

WIN Number / Site Name <u>Butcher Pen CR at Confederate</u> <u>20030082</u> <u>30.264590, -81.734333</u>					WBID Number <u>2322</u>		Matrix: Surface ☐ Fresh ☐ Surface Salt ☒		Sample Type: E. coli ☒ Enterococcus ☐ Fecal ☐		Initials Sample & Preservation <u>Km</u>		Initials Documentation <u>Km</u>		
Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☒					Sample Ice Preserved in 15 minutes? Yes ☒ No ☐										
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack					
<u>1216</u>	<u>0.35</u>	<u>0.16</u>	<u>23.1</u>	<u>7212</u>	<u>4.08</u>	<u>7.78</u>	<u>9.03</u>	<u>107.9</u>	<u>0.35</u>	<u>Ebb</u>					
										<u>VOB</u>					
Comments and Weather: <u>clear weather, no recent rain</u>															

WIN Number / Site Name <u>Butcher Pen CR at Wesconnett</u> <u>20030760</u> <u>30.259961, -81.739879</u>					WBID Number <u>2322</u>		Matrix: Surface ☒ Fresh ☒ Surface Salt ☐		Sample Type: E. coli ☒ Enterococcus ☐ Fecal ☐		Initials Sample & Preservation <u>Km</u>		Initials Documentation <u>Km</u>		
Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☒					Sample Ice Preserved in 15 minutes? Yes ☒ No ☐										
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack					
<u>1240</u>	<u>1.03</u>	<u>0.3</u>	<u>18.2</u>	<u>356.7</u>	<u>0.17</u>	<u>7.4</u>	<u>5.60</u>	<u>60.7</u>	<u>1.03</u>	<u>Ebb</u>					
										<u>VOB</u>					
Comments and Weather: <u>clear weather, no recent rain</u>															

WIN Number / Site Name					WBID Number		Matrix: Surface ☐ Fresh ☐ Surface Salt ☐		Sample Type: E. coli ☐ Enterococcus ☐ Fecal ☐		Initials Sample & Preservation		Initials Documentation		
Sample Access: Wading ☐ Dock ☐ From Shore ☐ Bridge ☐					Sample Ice Preserved in 15 minutes? Yes ☐ No ☐										
Time	Total depth(m)	Sample depth(m)	Temp °C	Conductivity µmhos	Salinity ppt	pH s.u.	D.O. mg/L	D.O. % sat	Secchi m	Tide Ebb/ Flood Slack					
Comments and Weather:															

Signature: _____ Date: _____

Field Sheet Scanned (Initials/date): _____ Parameters uploaded to LIMs (Initials/date): _____

Data QC'd in LIMs (Initials/date): _____ Data Migrated to WIN (Initials/date): _____

28320 JP Win numbers only



SR #
ALS Contact

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Chain of Custody

SMF.9

3/14/2016