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

2022-08-01-GS SMAP

Meter ID: YSI ResI RQ- 2022-07-04-21 Project: LSJRSW

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

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 8/1/2022

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Barometer mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	JPaugh	8/3/22	721	23.4	761	8.5	8.5	100.2	—	1.025	(P) / F	(L) F
ICV	"	8/3/22	723	23.2	761	8.5	8.58	100.4	—	1.023	(P) / F	(L) F
CCV	JPaugh	8/3/22	1633	24.6	760	8.3	8.24	99.4	—	—	(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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	JPaugh	8/3/22	724	220225A	3/23	1000	1000	(P) / F	(L) F
ICV	"	"	726	210917A	9/22	100	100	(P) / F	(L) F
CCV	JPaugh	8/3/22	1635	211122A	12/22	5000	4996	(P) / F	(L) / F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 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.	JPaugh	8/3/22	727	4203B87	2/24	7.	24.1	7.01	15.3	(P) / F	(L) / F
Calibr.	"	"	733	2205F96	5/24	4.	24.2	4.00	162.7	(P) / F	(L) / F
Calibr.	"	"	735	2202A03	7/23	10.	24.1	10.00	185	(P) / F	(L) / F
ICV	"	"	738	2205F96	5/24	4	23.7	4.00	158	(P) / F	(L) / F
CCV	JPaugh	8/3/22	1637	2202A03	7/23	10	25.1	10.03	188	(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 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 170.2, slope from 4 to 7 178 (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: 8/1/2022
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	JPaugh	8/3/22	740	0.00	0.00	(P) / F	(L) F

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

COMMENTS:

CHAIN OF CUSTODY RECORD

DIVERSIFIED ENVIRONMENTAL LABORATORIES, INC.

Project Number: (Lab Use Only)

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

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Company Name: Florida Department of Environmental Protection
Address: 8600 Baymeadows Way W Ste 100
City: Jacksonville State: FL Zip: 32256
Attn.: Jeremy Parrish Jeremy.M.Parrish@floridadep.gov
Tel. E-mail or Fax: DEP-Overflowmicro@dep.state.fl.us
Project Name: BMAP 2
Project Number: RQ-2022- 08-01-65
Project Location:
Sampler Name/Signature: Katrin Villinger

Sample # (Lab Use Only)	Sample Identification	Date Sampled	Time Sampled	Sample Matrix Code	Specific Cond. (Field)	Comp	Grab	E. Coli - Quantitray	Enterococci - Quantitray	Coliform, Fecal - MF 3 Dilutions	Container Information (Qty, Size, & Type)									Container Preservation Codes									Parameters								
											NPW	NPW	NPW							6	6	6														
1	20030760	8/3/22	1305	NPW	232		✓	1																												
2	20030082	"	1315	"	209		✓	1																												
3	20030801	"	1340	"	2776		✓	1																												
4	20030953	"	1355	"	339.1		✓	1																												
5																																				
6																																				
7																																				
8																																				
9																																				
0																																				

Sample Matrix Codes:
A. Air P. Petroleum
B. Bulk S. Soil/Sludge
W. Wipe O. Other _____
PW. Potable Water
NPW. Non-Potable Water

Sample Kit or Container Lot #

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: 0.5 °C
Sample Cont. Temp: 3.4 °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. #: _____

Special Instructions:

Transfer Numbers	Relinquished By	Date / Time	Received By	Date / Time
1-4		8/3/22 1435		08/03/22 1435

NELAP ACCREDITED TNI LABORATORY
Certification #E821059

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date:	8/3/2022	**Collected By:**	Jeremy Parrish, Katrin Villinger
Customer:	NE-DIST	**Sampling Agency:**	FDEP
RQ:	RQ-2022-08-01-65	**Project ID**:	BMAP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 0 **Delivery Method:** HandDelivered

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
BIG FISHWEIR CR SF @ HAMILTON ST	20030801
LITTLE FISHWEIR AT OAK ST.	20030953
BUTCHER PEN CR @ CONFEDERATE PT ROAD	20030082
BUTCHER PEN CR AT WESCONNETT	20030760

RELINQUISHED BY(SIGNATURE):

DATE/TIME: 8/3/2022 1600 EST

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:

RQ-2022-08-01-65	**Collected By**: Jeremy Parrish, Katrin Villinger
Customer: FDEP	**Field Report Prepared by**: Jeremy Parrish, Katrin Villinger
Project ID: SMP	**Sampling Agency**: FDEP
WIN ID/Field ID:  **WIN ID/Field ID:** 20030801	**Comments**: Microbiology sample(s) submitted to contract laboratory.
Location: **Location**: BIG FISHWEIR CR SF @ HAMILTON ST	
Matrix: Fresh	(Check One) ✓Grab ☐ Composite

Date and Time {EST}	DO (mg/L)	DO (%SAT)	Temp. ©	pH	Sample Depth (m)	Secchi Depth	Total Depth (m)	Sp COND (µmhos /cm)	Salinity (PPTh
8/3/2022 1340	6.08	76.8	27	7.4	0.15	0.35	0.35	277.6	0.13

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		
		Lot #			**Exp:**									
Metals (P-500ML)		W-ICPMS		W-ICP		W-HARD			Ice	HNO3*		<2		
		Lot #			**Exp:**									
Filtered Nutrients (P125ML)		W-PO4-F		Field Filtered 0.45 um Filter					Ice					
		Filter Lot #		**Syringe Lot #**										
BOD (BP-1L)		OV-BODUNIN							Ice					
Chlorophyll (BP-1L)		CHLSUITE-W							Ice					
Physical/Aggregate (Fresh) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W- TDS							Ice					
Physical/Aggregate (Marine) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY							Ice					
Macroinvertebrates (PJ-2L)		MI-FW-QLDC	**Formalin Lot #**						Formalin					
Periphyton (PT-50ML)		ALGAE-ID							Ice					
Microbiology (Contract Lab Bottle)	X	E Coli		F Coli		Enterococci		x	Ice				1	B
	X	Contract Lab												
Molecular (QPCR-P-500ML)		PCR-HF183		PCR-BacR		PCR-DG3			Ice					
		PCR-GULL2		PCR-GFD										
Tracers (BG-500ML)		W-E8321-DI		W-E8321-MS					Ice					
Pesticides (BG-500ML) (BG-1L)		W-E8321-DI		W-E8321-MS		W-PSNP-TQ			Ice	**MCAA Exp.**	**MCAA Lot#**			
		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA Buffer Solution)		W-CT-CL-R								
		W-TR-SQ-R		W-PCB-TQ-R										
Phytoplankton		DTY-QN-C		PKD-QN-BV					Ice					

RQ-2022-08-01-65	**Collected By**: Jeremy Parrish, Katrin Villinger
Customer: FDEP	**Field Report Prepared by**: Jeremy Parrish, Katrin Villinger
Project ID: SMP	**Sampling Agency**: FDEP
WIN ID/Field ID:  **WIN ID/Field ID:** 20030953	**Comments**: Microbiology sample(s) submitted to contract laboratory.
Location: **Location**: LITTLE FISHWEIR AT OAK ST.	
Matrix: Fresh	(Check One) ✓Grab ☐ Composite

Date and Time {EST}	DO (mg/L)	DO (%SAT)	Temp. ©	pH	Sample Depth (m)	Secchi Depth	Total Depth (m)	Sp COND (µmhos /cm)	Salinity (PPTh
8/3/2022 1355	4.61	58.9	27.7	7.13	0.3	0.755	0.755	339.1	0.16

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		
		Lot #			**Exp:**									
Metals (P-500ML)		W-ICPMS		W-ICP		W-HARD			Ice	HNO3*		<2		
		Lot #			**Exp:**									
Filtered Nutrients (P125ML)		W-PO4-F		Field Filtered 0.45 um Filter					Ice					
		Filter Lot #		**Syringe Lot #**										
BOD (BP-1L)		OV-BODUNIN							Ice					
Chlorophyll (BP-1L)		CHLSUITE-W							Ice					
Physical/Aggregate (Fresh) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W- TDS							Ice					
Physical/Aggregate (Marine) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY							Ice					
Macroinvertebrates (PJ-2L)		MI-FW-QLDC	**Formalin Lot #**						Formalin					
Periphyton (PT-50ML)		ALGAE-ID							Ice					
Microbiology (Contract Lab Bottle)	X	E Coli		F Coli		Enterococci		x	Ice				1	B
	X	Contract Lab												
Molecular (QPCR-P-500ML)		PCR-HF183		PCR-BacR		PCR-DG3			Ice					
		PCR-GULL2		PCR-GFD										
Tracers (BG-500ML)		W-E8321-DI		W-E8321-MS					Ice					
Pesticides (BG-500ML) (BG-1L)		W-E8321-DI		W-E8321-MS		W-PSNP-TQ			Ice	**MCAA Exp.**	**MCAA Lot#**			
		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA Buffer Solution)		W-CT-CL-R								
		W-TR-SQ-R		W-PCB-TQ-R										
Phytoplankton		DTY-QN-C		PKD-QN-BV					Ice					

RQ-2022-08-01-65	**Collected By**: Jeremy Parrish, Katrin Villinger
Customer: FDEP	**Field Report Prepared by**: Jeremy Parrish, Katrin Villinger
Project ID: SMP	**Sampling Agency**: FDEP
WIN ID/Field ID:  **WIN ID/Field ID:** 20030082	**Comments**: Microbiology sample(s) submitted to contract laboratory.
Location: **Location**: BUTCHER PEN CR @ CONFEDERATE PT ROAD	
Matrix: Fresh	(Check One) ✓Grab ☐ Composite

Date and Time {EST}	DO (mg/L)	DO (%SAT)	Temp. ©	pH	Sample Depth (m)	Secchi Depth	Total Depth (m)	Sp COND (µmhos /cm)	Salinity (PPTh
8/3/2022 1315	3.76	48.7	28.6	7.11	0.3	0.4	0.946	209.3	0.1

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		
		Lot #			**Exp:**									
Metals (P-500ML)		W-ICPMS		W-ICP		W-HARD		Ice		HNO3*		<2		
		Lot #			**Exp:**									
Filtered Nutrients (P125ML)		W-PO4-F		Field Filtered 0.45 um Filter				Ice						
	Filter Lot #			**Syringe Lot #**										
BOD (BP-1L)		OV-BODUNIN						Ice						
Chlorophyll (BP-1L)		CHLSUITE-W						Ice						
Physical/Aggregate (Fresh) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W- TDS						Ice						
Physical/Aggregate (Marine) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY						Ice						
Macroinvertebrates (PJ-2L)		MI-FW-QLDC	**Formalin Lot #**					Formalin						
Periphyton (PT-50ML)		ALGAE-ID						Ice						
Microbiology (Contract Lab Bottle)	X	E Coli		F Coli		Enterococci	x	Ice					1	B
	X	Contract Lab												
Molecular (QPCR-P-500ML)		PCR-HF183		PCR-BacR		PCR-DG3		Ice						
		PCR-GULL2		PCR-GFD										
Tracers (BG-500ML)		W-E8321-DI		W-E8321-MS				Ice						
Pesticides (BG-500ML) (BG-1L)		W-E8321-DI		W-E8321-MS		W-PSNP-TQ		Ice	**MCAA Exp.**		**MCAA Lot#**			
		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA Buffer Solution)		W-CT-CL-R								
		W-TR-SQ-R		W-PCB-TQ-R										
Phytoplankton		DTY-QN-C		PKD-QN-BV				Ice						

RQ-2022-08-01-65	**Collected By**: Jeremy Parrish, Katrin Villinger
Customer: FDEP	**Field Report Prepared by**: Jeremy Parrish, Katrin Villinger
Project ID: SMP	**Sampling Agency**: FDEP
WIN ID/Field ID: **WIN ID/Field ID:** 20030760	**Comments**: Microbiology sample(s) submitted to contract laboratory.

Location:
Location: BUTCHER PEN CR AT WESCONNETT

Matrix: Fresh | (Check One) ✓Grab ☐ Composite

Date and Time {EST}	DO (mg/L)	DO (%SAT)	Temp. ©	pH	Sample Depth (m)	Secchi Depth	Total Depth (m)	Sp COND (µmhos /cm)	Salinity (PPTh
8/3/2022 1305	6.07	75.8	26.8	7.4	0.3	0.94	0.94	232	0.11

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 Lot # Exp:	Ice H2SO4*	<2		
Metals (P-500ML)	W-ICPMS W-ICP W-HARD Lot # Exp:	Ice HNO3*	<2		
Filtered Nutrients (P125ML)	W-PO4-F Field Filtered 0.45 um Filter Filter Lot # Syringe Lot #	Ice			
BOD (BP-1L)	OV-BODUNIN	Ice			
Chlorophyll (BP-1L)	CHLSUITE-W	Ice			
Physical/Aggregate (Fresh) (P-1L)	Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W- TDS	Ice			
Physical/Aggregate (Marine) (P-1L)	Alkalinity / W-F / W-TSS / TURBIDITY	Ice			
Macroinvertebrates (PJ-2L)	MI-FW-QLDC **Formalin Lot #**	Formalin			
Periphyton (PT-50ML)	ALGAE-ID	Ice			
Microbiology (Contract Lab Bottle)	X E Coli F Coli Enterococci X Contract Lab	x Ice		1	B
Molecular (QPCR-P-500ML)	PCR-HF183 PCR-BacR PCR-DG3 PCR-GULL2 PCR-GFD	Ice			
Tracers (BG-500ML)	W-E8321-DI W-E8321-MS	Ice			
Pesticides (BG-500ML) (BG-1L)	W-E8321-DI W-E8321-MS W-PSNP-TQ W-PCL-TQ-R W-CARB-AA (5 ml of MCAA Buffer Solution) W-CT-CL-R W-TR-SQ-R W-PCB-TQ-R	Ice MCAA Exp.	MCAA Lot#		
Phytoplankton	DTY-QN-C PKD-QN-BV	Ice			