

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

RQ-2021-04-19-28 Nassau North

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

Meter ID: YSI Best

RQ-2021-04-05-31

Project: Nassau North Bank

- 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<br>DEP SOP<br>FT 1500 | Name     | Date    | Time<br>CT-ET | Temp<br>°C | Baro-<br>meter<br>mmHg | D.O.<br>Chart<br>mg/L | Meter<br>D.O.<br>mg/L | % DO  | Probe<br>Charge | Probe<br>Gain | Pass<br>/ Fail | Lab<br>/ Field |
|--------------------------|----------|---------|---------------|------------|------------------------|-----------------------|-----------------------|-------|-----------------|---------------|----------------|----------------|
| Calibr.                  | Jeremiah | 4/20/21 | 734           | 22.1       | 760                    | 8.7                   | 8.7                   | 100.0 | —               | 1.056         | (P) / F        | (L) / F        |
| ICV                      | J        | 4/20/21 | 735           | 22.1       | 760                    | 8.7                   | 8.72                  | 100.0 | —               | 1.056         | (P) / F        | (L) / F        |
| CCV                      | Jeremiah | 4/20/21 | 1422          | 22.2       | 760                    | 8.7                   | 8.63                  | 99.1  | —               | —             | (P) / F        | (L) / F        |
| CCV                      |          |         |               |            |                        |                       |                       |       |                 |               | P / F          | L / F          |

DO Acceptance criteria from Table  $\pm 0.3$  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.<br>Cond.<br>FT 1200 | Name      | Date    | Time<br>CT-ET | Lot #   | Expir.<br>Date | Standard<br>$\mu$ mhos/cm | Meter<br>Reading<br>$\mu$ mhos/cm | Pass<br>/ Fail | Lab<br>/ Field |
|---------------------------|-----------|---------|---------------|---------|----------------|---------------------------|-----------------------------------|----------------|----------------|
| Calibr.                   | J Purnish | 4/20/21 | 737           | 201222B | 1/22           | 1000                      | 1000                              | (P) / F        | (L) / F        |
| ICV                       | J         |         | 738           | 201222A | 1/22           | 100                       | 101.7                             | (P) / F        | (L) / F        |
| CCV                       | J Purnish | 4/20/21 | 1423          | 200102C | 9/21           | 1413                      | 1411                              | (P) / F        | (L) / F        |
| CCV                       |           |         |               |         |                |                           |                                   | P / F          | L / F          |

Conductivity Acceptance criteria  $\pm 5\%$

| pH<br>DEP SOP<br>FT 1100 | Name      | Date    | Time<br>CT-ET | Lot #   | Expir.<br>Date | pH<br>Buffer<br>SU | Temp<br>°C | Meter<br>reading<br>SU | mV     | Pass<br>/ Fail | Lab<br>/ Field |
|--------------------------|-----------|---------|---------------|---------|----------------|--------------------|------------|------------------------|--------|----------------|----------------|
| Calibr.                  | J Purnish | 4/20/21 | 742           | 2010F27 | 10/22          | 7.                 | 22.8       | 7.01                   | -42.9  | (P) / F        | (L) / F        |
| Calibr.                  | J         |         | 745           | 2010C31 | 9/22           | 4.                 | 22.9       | 4.00                   | 138.9  | (P) / F        | (L) / F        |
| Calibr.                  | J         |         | 747           | 2012797 | 5/22           | 10.                | 22.8       | 10.00                  | -211.1 | (P) / F        | (L) / F        |
| ICV                      | J         |         | 748           | 2010C31 | 9/22           | 4.                 | 22.8       | 4.00                   | 136.8  | (P) / F        | (L) / F        |
| CCV                      | J Purnish | 4/20/21 | 1425          | 2012797 | 5/22           | 10.                | 22.9       | 10.00                  | -212.7 | (P) / F        | (L) / F        |
| CCV                      |           |         |               |         |                |                    |            |                        |        | P / F          | L / F          |

pH Acceptance criteria  $\pm 0.2$  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)

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<br>(Daily Calibration &<br>ICV) | Name      | Date    | Time<br>CT-ET | Calibrated<br>Value (0.00 or<br>Offset), meters | ICV Value,<br>meters | Pass /<br>Fail | Lab /<br>Field |
|----------------------------------------------|-----------|---------|---------------|-------------------------------------------------|----------------------|----------------|----------------|
| Pressure mode in air                         | J Purnish | 4/20/21 | DSO           | 0.00                                            | 0.00                 | (P) / F        | (L) / F        |

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

COMMENTS:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CHAIN OF CUSTODY FORM

|                             |                                                     |
|-----------------------------|-----------------------------------------------------|
| <b>Date:</b> 4/20/2021      | <b>Collected By:</b> Jeremy Parrish, Kelly McDonald |
| <b>Customer:</b> NE-DIST    | <b>Sampling Agency:</b> FDEP                        |
| <b>RQ:</b> RQ-2021-04-19-28 | <b>Project ID:</b> SMP                              |

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

**Number of Coolers Shipped:** 1

**Delivery Method:** FedEx

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

| Site Location                                    | Field ID/WIN ID                                                                                     |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| PIGEON CREEK AT US 1                             | <br>19010099      |
| PIGEON CREEK @ ANDREWS RD                        | <br>19010098      |
| Creek draining former Hampton lake 100m above rd | <br>G4NE0292    |
| FB                                               | <br>FB_04202021 |

RELINQUISHED BY(SIGNATURE):

*Kelly A McDonald*

DATE/TIME: 4/20/2021

1600

**THIS SECTION TO BE COMPLETED BY LABORATORY**

**Rec'd/Inspected By:**

**Rec'd/Inspected Date:**



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End  
of Day CCV  
☒ Yes / No

**WIN Station Name:** PIGEON CREEK @ ANDREWS RD **Date:** 4/20/2021  
**WIN/Field ID:** 19010098 **WBID:** 2105 **ENR:** - **Latitude:** 30.7286  
**County:** NASSAU **Org ID:** 21FLA **Longitude:** -81.9654  
**Receiving Body of Water:** Nassau - St. Marys **RQ:** 2021-04-19-28

| Sampling Team Members               |                | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-------------------------------------|----------------|-----------------|-------------------|---------------|--------------|--------------------|
| <input checked="" type="checkbox"/> | Jeremy Parrish |                 | x                 |               | x            | x                  |
| <input checked="" type="checkbox"/> | Kelly McDonald | x               |                   | x             |              |                    |
| <input type="checkbox"/>            |                |                 |                   |               |              |                    |
| <input type="checkbox"/>            |                |                 |                   |               |              |                    |

| Sampling Equipment                                   |                                          |
|------------------------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> Sample Container | <input type="checkbox"/> Carboy          |
| <input type="checkbox"/> Dipper                      | <input type="checkbox"/> Van Dorn        |
| <input type="checkbox"/> Syringe                     | <input checked="" type="checkbox"/> Pole |
| Depth measured with: Meter                           |                                          |
| Secchi Equipment ID:                                 |                                          |
| Collection Method                                    |                                          |
| <input type="checkbox"/> Wading                      | <input type="checkbox"/> Canoe/Kayak     |
| <input checked="" type="checkbox"/> From Shore       | <input type="checkbox"/> Electric Motor  |
| <input type="checkbox"/> Other                       | <input type="checkbox"/> Gasoline Motor  |

|                                                                                                                                                                                                                                                                        |  |                   |  |              |  |                                  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------|--|--------------|--|----------------------------------|--|--|--|--|--|
| <b>Water Level:</b> <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Low <input type="checkbox"/> High <input type="checkbox"/> Dry <input type="checkbox"/> Pooled <input type="checkbox"/> Flooded                                                |  |                   |  |              |  | <b>Meter ID#</b> DESI            |  |  |  |  |  |
| <b>Photos:</b> NO                                                                                                                                                                                                                                                      |  | <b>Flow:</b> FLOW |  | <b>Tide:</b> |  | <b>Tide Times:</b><br>High: Low: |  |  |  |  |  |
| <b>Biological Samples Collected:</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> HA <input type="checkbox"/> SCI <input type="checkbox"/> RPS <input type="checkbox"/> Algae ID <input type="checkbox"/> LVS <input type="checkbox"/> LVI Other: |  |                   |  |              |  |                                  |  |  |  |  |  |
| <b>SBIO ID Numbers:</b>                                                                                                                                                                                                                                                |  |                   |  |              |  |                                  |  |  |  |  |  |
| <b>Notes:</b><br>BARELY FLOWING                                                                                                                                                                                                                                        |  |                   |  |              |  |                                  |  |  |  |  |  |

## Duplicate Sample

|                             |              |                      |              |
|-----------------------------|--------------|----------------------|--------------|
| <b>Time Zone:</b> CEN       | <b>Time:</b> | <b>Field ID:</b> N/A | (WIN ID_DUP) |
| <b>WIN DMT Activity ID:</b> |              |                      |              |

## Blank

|                                |                      |                           |                      |
|--------------------------------|----------------------|---------------------------|----------------------|
| <b>Time Zone:</b>              | <b>Time:</b>         | <b>Field ID:</b>          | (Blank Type_DDDMMYY) |
| <b>DI Source:</b>              | <b>Location:</b>     |                           |                      |
| <b>DI Type:</b>                | <b>Equipment ID:</b> |                           |                      |
| <b>DI Container (Name/ID):</b> |                      | <b>DI Container Type:</b> |                      |

LIMS EVENT ID: WIN Import ID:  
Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:  
(Initials/Date) (Initials/Date)  
Scan/Save Field Sheets Migrate Data to WIN: Verify Data In WIN:  
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-04-19-28

Customer: WQAP

Project ID: SMP

Collected By: Jeremy Parrish, Kelly McDonald

Field Report Prepared By: Jeremy Parrish

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



19010098

Location: PIGEON CREEK @ ANDREWS RD

Comments: Microbiology sample(s) submitted to contract laboratory

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

| Date      | Time        | DO (mg/L) | DO (%SAT) | Temp. (C°) | pH   | Sample Depth (m) | Secchi Disk (m)                                   | Total Depth (m) | Sp COND (µmhos/cm) | Salinity (PPT <sub>h</sub> ) |
|-----------|-------------|-----------|-----------|------------|------|------------------|---------------------------------------------------|-----------------|--------------------|------------------------------|
| 4/20/2021 | 1220<br>CEN | 5.61      | 60.1      | 18.6       | 3.97 | 0.3              | 0.3<br><input type="checkbox"/> VOB (S)           | 0.626           | 57.9               | 0.03                         |
|           |             |           |           |            |      |                  | Central Lab please use top row for login purposes |                 |                    |                              |
|           | CEN         |           |           |            |      |                  |                                                   |                 |                    |                              |

| Parameter Suite                    | Parameter Methods                                                                                                                                                                                     | Preservation                                                                       | pH Check                               | # Bottles sent to Lab | Bottle Group |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------|-----------------------|--------------|
| Preserved Nutrients (P-500ML)      | <input checked="" type="checkbox"/> W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP                                                                                                                       | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> H2SO4* | <input checked="" type="checkbox"/> <2 | 1                     | B            |
|                                    | Lot # Sa0293040 Exp: 10.19.21                                                                                                                                                                         |                                                                                    |                                        |                       |              |
| Metals (P-500ML)                   | <input checked="" type="checkbox"/> W-ICPMS <input checked="" type="checkbox"/> W-ICP <input checked="" type="checkbox"/> W-HARD                                                                      | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> HNO3*  | <input checked="" type="checkbox"/> <2 | 1                     | B            |
|                                    | Lot # Na0344060 Exp: 1.4.22                                                                                                                                                                           |                                                                                    |                                        |                       |              |
| Filtered Nutrients (P125ML)        | <input checked="" type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                                                                                         | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | B            |
|                                    | Filter Lot # R0nb35407                                                                                                                                                                                |                                                                                    |                                        |                       |              |
|                                    | Syringe Lot #                                                                                                                                                                                         |                                                                                    |                                        |                       |              |
| Chlorophyll (BP-1L)                | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                                                        | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | B            |
| Physical/Aggregate (Fresh) (P-1L)  | <input checked="" type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS                                                                                       | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | B            |
| Physical/Aggregate (Marine) (P-1L) | <input type="checkbox"/> Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY                                                                                                                               | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Macroinvertebrates (PJ-2L)         | <input type="checkbox"/> MI-FW-QLDC                                                                                                                                                                   | <input type="checkbox"/> Formalin                                                  |                                        |                       |              |
| Periphyton (PT-50ML)               | <input type="checkbox"/> ALGAE-ID                                                                                                                                                                     | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Microbiology (Contract Lab Bottle) | <input checked="" type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input type="checkbox"/> Enterococci<br><input checked="" type="checkbox"/> Contract Lab                                   | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | B            |
| Molecular (QPCR-P-500ML)           | <input type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-BacR <input type="checkbox"/> PCR-DG3<br><input type="checkbox"/> PCR-GULL2 <input type="checkbox"/> PCR-GFD <input type="checkbox"/> | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Tracers (BG-500ML)                 | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> W-E8321-MS                                                                                                                               | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Pesticides (BG-500ML) (BG-1L)      | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> WE8321-MS <input type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-CT-CL-R                                                          | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
|                                    | <input type="checkbox"/> W-PCL-SQ-R <input type="checkbox"/> W-CARB-AA (5 ml of MCAA** Buffer Solution) <input type="checkbox"/> W-DIELDRIN                                                           |                                                                                    |                                        |                       |              |
| Phytoplankton/Periphyton           | DTM-QL-C <input type="checkbox"/> PEN-QL-C <input type="checkbox"/> DTY-QN-C <input type="checkbox"/> PKD-QN-C                                                                                        | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
|                                    | DTM-QN-C <input type="checkbox"/> PRN-QN-C <input type="checkbox"/> PKD-QN-BV <input type="checkbox"/>                                                                                                |                                                                                    |                                        |                       |              |

Name:  
Jeremy Parrish  
Kelly McDonald

Signature:

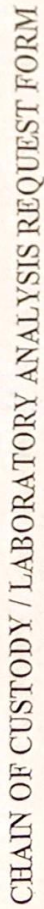
Kelly A McDonald

Date:

4/20/2021

\*2.0 ml of Preservative used unless noted otherwise.

\*\*MCAA: Monochloroacetic acid buffer solution



SR #

ALS Contact Mandy Sullivan

9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011

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