

# 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: Desi

& RQ- 2019-10-07-38

2019-10-07-20 Project: ICW Boat

- 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 \_\_\_\_\_

| 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.            | Briggen Davis | 10/10/19 | 754        | 23.0    | 762             | 8.6             | ✓               | 100.3 | ✓            | ✓          | (P) F       | (L) F       |
| ICV                | ↓             | ↓        | 755        | 23.1    | 762             | 8.6             | 8.58            | 100.3 | ✓            | ✓          | (P) F       | (L) F       |
| CCV                | B - D -       | 10/10/19 | 1617       | 24.6    | 761.6           | 8.3             | 8.29            | 99.6  | ✓            | ✓          | (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. Cond. FT 1200 | Name          | Date     | Time CT-ET | Lot #   | Expir. Date | Standard $\mu$ mhos/cm | Meter Reading $\mu$ mhos/cm | Pass / Fail | Lab / Field |
|---------------------|---------------|----------|------------|---------|-------------|------------------------|-----------------------------|-------------|-------------|
| Calibr.             | Briggen Davis | 10/10/19 | 757        | 190711B | 7/20        | 1000                   | 1000                        | (P) F       | (L) F       |
| ICV                 | ↓             | ↓        | 759        | 190711C | 7/20        | 50,000                 | 50,724                      | (P) F       | (L) F       |
| CCV                 | ↓             | ↓        | 1620       | 190711B | 7/20        | 1000                   | 1003                        | (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.            | Briggen Davis | 10/10/19 | 803        | 2902778 | 1/21        | 7.0          | 24.0    | 7.01             | -278   | (P) F       | (L) F       |
| Calibr.            |               |          | 805        | 2904800 | 3/21        | 4.0          | 24.0    | 4.0              | 152.6  | (P) F       | (L) F       |
| Calibr.            |               |          | 806        | 2810F55 | 4/20        | 10.01        | 24.0    | 10.01            | -199.9 | (P) F       | (L) F       |
| ICV                | ↓             | ↓        | 808        | 2902778 | 1/21        | 7.0          | 24.0    | 7.05             | -272   | (P) F       | (L) F       |
| CCV                | ↓             | ↓        | 1623       | 2810F55 | 4/20        | 10.01        | 24.5    | 10.08            | -205.7 | (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 (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                   | B - D - | 10/10/19 | 811        | 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 STRATEGIC MONITORING PROGRAM FIELD SHEET

Data Qualified?

Yes / No

January 2019

WIN Station Name: Open creek 200 meters above mouthDate: 10/10/2019

(mm/dd/yyyy)

WIN/ Field ID: G2NE1178WBID: 2299ALatitude: 30.261952

(Decimal Degrees)

County: DuvalORG ID: 21FLALongitude: -81.43236

(Decimal Degrees)

Receiving Body of Water: ICW

RQ-2019- 10-07-36

| Sampling Team Members |  |  |  |  |  | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-----------------------|--|--|--|--|--|-----------------|-------------------|---------------|--------------|--------------------|
| The Brian Davis       |  |  |  |  |  |                 |                   |               |              |                    |
| Amy Kalmbacher        |  |  |  |  |  |                 |                   |               |              |                    |
| K.A.                  |  |  |  |  |  |                 |                   |               |              |                    |

| Sampling Equipment                                   |                                   |                               |  |
|------------------------------------------------------|-----------------------------------|-------------------------------|--|
| <input checked="" type="checkbox"/> Sample Container | <input type="checkbox"/> Van Dorn | <input type="checkbox"/> Pole |  |
| <input type="checkbox"/> Carboy                      | <input type="checkbox"/> Syringe  |                               |  |
| <input type="checkbox"/> Dipper                      | <input type="checkbox"/> Other    |                               |  |
| Depth Measured with <u>well #1</u>                   |                                   |                               |  |
| Equipment ID <u>0-740 #44</u>                        |                                   |                               |  |

| Collection Method                   |                                                    |  |  |
|-------------------------------------|----------------------------------------------------|--|--|
| <input type="checkbox"/> Wading     | <input type="checkbox"/> Canoe/Kayak               |  |  |
| <input type="checkbox"/> From Shore | <input type="checkbox"/> Electric Motor            |  |  |
| <input type="checkbox"/> Other      | <input checked="" type="checkbox"/> Gasoline Motor |  |  |

| Water Level: Dry/ Pooled/ Low / Normal <u>High</u> / Flooded |      |                                                |                  |                                 |           | Meter ID# <u>Deci</u>           |      | Matrix: Fresh / <u>Marine</u> / DI |                    |            |
|--------------------------------------------------------------|------|------------------------------------------------|------------------|---------------------------------|-----------|---------------------------------|------|------------------------------------|--------------------|------------|
| Photos: Yes <u>No</u>                                        |      | Flow: No Flow / Intestinal <u>Flowing</u> / NA |                  | Tide: Rising/Falling/ Slack/ NA |           | Tide Times: High <u>900</u> Low |      |                                    |                    |            |
| Time Zone                                                    | Time | Total Depth (m)                                | Sample Depth (m) | Secchi Disk (m)                 | DO (mg/L) | DO (%SAT)                       | pH   | Salinity (PPT)                     | Sp COND (µmhos/cm) | Temp. (C°) |
| EST                                                          | 1005 | 1.6                                            | 0.3              |                                 | 5.14      | 70.2                            | 7.29 | 20.41                              | 32706              | 25.2       |
| CEN                                                          | 1007 |                                                | 1.17             |                                 | 5.07      | 69.7                            | 7.31 | 21.34                              | 34049              | 25.2       |

|                                                                              |  |          |  |        |  |         |  |                |  |        |  |
|------------------------------------------------------------------------------|--|----------|--|--------|--|---------|--|----------------|--|--------|--|
| Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS LVI Other: |  |          |  |        |  |         |  |                |  |        |  |
| SBIO ID Numbers:                                                             |  | SBIO-ID: |  | HA-ID: |  | RPS-ID: |  | Macrophyte-ID: |  | LIMS#: |  |

| Parameter Suite             | Parameter Methods                                                                                                                                                                                                                                       | Preservation                                                           | Lot#             | Expiration      | pH Check                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------|-----------------|----------------------------------------|
| Preserved Nutrients         | <input checked="" type="checkbox"/> W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP                                                                                                                                                                         | <input checked="" type="checkbox"/> Ice <input type="checkbox"/> H2SO4 | <u>SA9129100</u> | <u>5/9/20</u>   | <input checked="" type="checkbox"/> <2 |
| Metals                      | <input checked="" type="checkbox"/> W-ICPMS <input type="checkbox"/> W-ICP                                                                                                                                                                              | <input type="checkbox"/> Ice <input type="checkbox"/> HNO3             | <u>NA8344050</u> | <u>12/10/15</u> | <input checked="" type="checkbox"/> <2 |
| Filtered Nutrients          | <input type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                                                                                                                                                      | <input checked="" type="checkbox"/> Ice                                | <u>R9BA86875</u> |                 |                                        |
| Chlorophyll                 | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                                                                                                          | <input checked="" type="checkbox"/> Ice                                |                  |                 |                                        |
| Physical/Aggregate (Fresh)  | <input type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS                                                                                                                                                    | <input type="checkbox"/> Ice                                           |                  |                 |                                        |
| Physical/Aggregate (Marine) | <input checked="" type="checkbox"/> Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY                                                                                                                                                                      | <input checked="" type="checkbox"/> Ice                                |                  |                 |                                        |
| Macroinvertebrates          | <input type="checkbox"/> MI-FW-QLDC                                                                                                                                                                                                                     | <input type="checkbox"/> Formalin                                      |                  |                 |                                        |
| Periphyton                  | <input type="checkbox"/> ALGAE-ID                                                                                                                                                                                                                       | <input type="checkbox"/> Ice                                           |                  |                 |                                        |
| Microbiology                | <input type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input checked="" type="checkbox"/> Enterococci                                                                                                                                         | <input checked="" type="checkbox"/> Ice                                |                  |                 |                                        |
| Molecular                   | <input type="checkbox"/> PCR-FILTER <input type="checkbox"/> PCR-BacR <input type="checkbox"/> PCR-GULL2<br><input checked="" type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-DG3 <input type="checkbox"/> PCR-GFD                             | <input checked="" type="checkbox"/> Ice                                |                  |                 |                                        |
| Tracers                     | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> W-E8321-MS                                                                                                                                                                                 | <input type="checkbox"/> Ice                                           |                  |                 |                                        |
| Pesticides                  | <input checked="" type="checkbox"/> W-PSNP-TQ <input checked="" type="checkbox"/> W-CT-CL-R <input type="checkbox"/> W-E8321-DI<br><input type="checkbox"/> W-PCL-SQ-R <input checked="" type="checkbox"/> WE8321-MS <input type="checkbox"/> W-CAR8-AA | <input checked="" type="checkbox"/> Ice                                |                  |                 |                                        |
| Phytoplankton               | <input checked="" type="checkbox"/> DTY-QN-C <input type="checkbox"/> PKD-QN-C                                                                                                                                                                          | <input type="checkbox"/> Ice                                           |                  |                 |                                        |

Notes:

WIN ID/Field ID: G2NE1178

Open creek 200 meters above mouth

Signature: B - P - Date: 10/10/15

Contains: 1:1 H2SO4  
Lot No.: SA9129100  
Expires: 05/09/20  
See Safety Data Sheet (SDS)

Contains: 1:1 HNO3  
Lot No.: NA8344050  
Expires: 12/10/19  
See Safety Data Sheet (SDS)

Contains: 1:1 H2SO4  
Lot No.: SA9129100  
Expires: 05/09/20  
See Safety Data Sheet (SDS)

Contains: 1:1 HNO3  
Lot No.: NA8344050  
Expires: 12/10/19  
See Safety Data Sheet (SDS)

LIMS EVENT ID: \_\_\_\_\_ WIN Import ID: \_\_\_\_\_

Enter Field Parameters, Verify Station ID in LIMS DMT: \_\_\_\_\_ QC Station ID, Field Parameters in LIMS DMT: \_\_\_\_\_

Scan/Save Field Sheets \_\_\_\_\_ Migrate Data to WIN: \_\_\_\_\_ Verify Data in WIN: \_\_\_\_\_

(Initials/Date) (Initials/Date) (Initials/Date)

# Florida Department of Environmental Protection

## Central Laboratory Submittal Form

ICW Boat

Customer: NE-DIST

Project ID: SMP

Requester: Jeremy M. ParrishField Report Prepared By: Kimberly ApplebyCollected By: B. Davis, A. Kalmbacher, K. ApplebySampling Agency: FDEP NE ROL

WIN ID/Field ID:



G2NE1178

Open creek 200 meters above mouth

|                                                                |  |                                                                            |  |                                                                                 |                                                                      |                                        |                                               |
|----------------------------------------------------------------|--|----------------------------------------------------------------------------|--|---------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab |  | Collection (comp begin or grab)<br>Date <u>10/10/2019</u> Time <u>1005</u> |  | <input checked="" type="checkbox"/> Eastern<br><input type="checkbox"/> Central | Composite end<br>Date _____ Time _____                               |                                        | Bottle Group(s)<br>(See pg 2)<br><br><b>A</b> |
| Matrix (type, e.g., Salt, Fresh, etc)<br><u>Salt</u>           |  | Diss. Oxygen<br><u>5.14</u>                                                |  | <input checked="" type="checkbox"/> mg/L<br><input type="checkbox"/> % sat      | Total Res. Chlorine (mg/L)<br><u>—</u>                               |                                        |                                               |
| Temp (C) <u>25.2</u>                                           |  | pH <u>7.29</u>                                                             |  | Sample Depth <u>0.3</u>                                                         | <input type="checkbox"/> ft<br><input checked="" type="checkbox"/> m | Sp. Conductance (umho/cm) <u>32706</u> |                                               |
| <input type="checkbox"/> dd<br><input type="checkbox"/> dms    |  | Salinity (ppt) <u>20.41</u>                                                |  | Comments                                                                        |                                                                      |                                        |                                               |

|                                                                |  |                                                          |  |                                                                      |                                                           |                           |                 |
|----------------------------------------------------------------|--|----------------------------------------------------------|--|----------------------------------------------------------------------|-----------------------------------------------------------|---------------------------|-----------------|
| <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab |  | Collection (comp begin or grab)<br>Date _____ Time _____ |  | <input type="checkbox"/> Eastern<br><input type="checkbox"/> Central | Composite end<br>Date _____ Time _____                    |                           | Bottle Group(s) |
| Matrix (type, e.g., Salt, Fresh, etc)                          |  | Diss. Oxygen                                             |  | <input type="checkbox"/> mg/L<br><input type="checkbox"/> % sat      | Total Res. Chlorine (mg/L)                                |                           |                 |
| Temp (C)                                                       |  | pH                                                       |  | Sample Depth                                                         | <input type="checkbox"/> ft<br><input type="checkbox"/> m | Sp. Conductance (umho/cm) |                 |
| <input type="checkbox"/> dd<br><input type="checkbox"/> dms    |  | Salinity (ppt)                                           |  | Comments                                                             |                                                           |                           |                 |

|                                                                |  |                                                          |  |                                                                      |                                                           |                           |                 |
|----------------------------------------------------------------|--|----------------------------------------------------------|--|----------------------------------------------------------------------|-----------------------------------------------------------|---------------------------|-----------------|
| <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab |  | Collection (comp begin or grab)<br>Date _____ Time _____ |  | <input type="checkbox"/> Eastern<br><input type="checkbox"/> Central | Composite end<br>Date _____ Time _____                    |                           | Bottle Group(s) |
| Matrix (type, e.g., Salt, Fresh, etc)                          |  | Diss. Oxygen                                             |  | <input type="checkbox"/> mg/L<br><input type="checkbox"/> % sat      | Total Res. Chlorine (mg/L)                                |                           |                 |
| Temp (C)                                                       |  | pH                                                       |  | Sample Depth                                                         | <input type="checkbox"/> ft<br><input type="checkbox"/> m | Sp. Conductance (umho/cm) |                 |
| <input type="checkbox"/> dd<br><input type="checkbox"/> dms    |  | Salinity (ppt)                                           |  | Comments                                                             |                                                           |                           |                 |

|                                                                |  |                                                          |  |                                                                      |                                                           |                           |                 |
|----------------------------------------------------------------|--|----------------------------------------------------------|--|----------------------------------------------------------------------|-----------------------------------------------------------|---------------------------|-----------------|
| <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab |  | Collection (comp begin or grab)<br>Date _____ Time _____ |  | <input type="checkbox"/> Eastern<br><input type="checkbox"/> Central | Composite end<br>Date _____ Time _____                    |                           | Bottle Group(s) |
| Matrix (type, e.g., Salt, Fresh, etc)                          |  | Diss. Oxygen                                             |  | <input type="checkbox"/> mg/L<br><input type="checkbox"/> % sat      | Total Res. Chlorine (mg/L)                                |                           |                 |
| Temp (C)                                                       |  | pH                                                       |  | Sample Depth                                                         | <input type="checkbox"/> ft<br><input type="checkbox"/> m | Sp. Conductance (umho/cm) |                 |
| <input type="checkbox"/> dd<br><input type="checkbox"/> dms    |  | Salinity (ppt)                                           |  | Comments                                                             |                                                           |                           |                 |

|                                     |                                |                                  |                                        |              |           |
|-------------------------------------|--------------------------------|----------------------------------|----------------------------------------|--------------|-----------|
| Relinquished By: <u>[Signature]</u> | Date/Time<br><u>10-10-2019</u> | Shipping Method<br><u>Fed Ex</u> | Number of Coolers Shipped:<br><u>2</u> | Received By: | Date/Time |
|-------------------------------------|--------------------------------|----------------------------------|----------------------------------------|--------------|-----------|

1645

|          |                                                    |                |                 |               |                            |                                     |                        |
|----------|----------------------------------------------------|----------------|-----------------|---------------|----------------------------|-------------------------------------|------------------------|
| Group: A | Bottle Type:                                       | P-1L           | # of Bottles: 1 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | ALKALINITY<br>TURBIDITY<br>W-BR-IC<br>W-F<br>W-TSS |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | BP-1L          | # of Bottles: 1 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | CHLSUITE-W                                         |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | P-250ML-WI-THI | # of Bottles: 1 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>1 → Sent to ALS</u> |
|          | NE-ALS-ENQ                                         |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | QPCR-P-500ML   | # of Bottles: 1 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | PCR-HF183                                          |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | BG-500ML       | # of Bottles: 1 | Preservative: | CH2CICOOH<br>Pre-Preserved | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | W-CARB-AA                                          |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | BG-500ML       | # of Bottles: 4 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>4</u>               |
|          | W-CT-CI-R<br>W-PCL-SQ-R                            |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | BG-500ML       | # of Bottles: 1 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | W-E8321-DI<br>W-E8321-MS                           |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | P-500ML        | # of Bottles: 1 | Preservative: | HNO3                       | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | W-ICP<br>W-ICPMS                                   |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | P-500ML        | # of Bottles: 1 | Preservative: | ICE And H2SO4              | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | W-NH3<br>W-NO2NO3<br>W-S-A-TP<br>W-TKN<br>W-TOC    |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | P-125ML        | # of Bottles: 1 | Preservative: | FILTER-ICE                 | Enter Number of Bottles Sent to Lab | <u>1</u>               |
|          | W-PO4-F                                            |                |                 |               |                            |                                     |                        |
| Group: A | Bottle Type:                                       | BG-1L          | # of Bottles: 4 | Preservative: | ICE                        | Enter Number of Bottles Sent to Lab | <u>—</u>               |

Group: A

Bottle Type:

BG-1L

# of Bottles: 4

Preservative:

ICE

Enter Number of Bottles Sent to Lab

4

W-PSNP-TQ

