

# 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:

PCSI

RQ:

2021-05-31-24

Project:

Lake Boland LVI

- 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

5/18/21

| 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>/<br>Fail | Lab<br>/<br>Field |
|--------------------------|-------------|---------|---------------|------------|------------------------|-----------------------|-----------------------|-------|-----------------|---------------|-------------------|-------------------|
| Calibr.                  | Brian Davis | 6/17/21 | 748           | 24.4       | 760.1                  | 8.4                   | ✓                     | 100.8 | ✓               | 1.05          | (P) F             | (L) F             |
| ICV                      | ↓           | ↓       | 750           | 24.5       | 760.0                  | 8.3                   | 8.33                  | 99.9  | ✓               | 1.05          | (P) F             | (L) F             |
| CCV                      | Kim Appleby | ↓       | 1709          | 26.1       | 759.9                  |                       | 8.00                  | 99.0  | -               | 1.05          | (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>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|-------------|---------|---------------|---------|----------------|---------------------------|-----------------------------------|-------------------|-------------------|
| Calibr.                   | Brian Davis | 6/17/21 | 752           | 20122B  | 1/22           | 1000                      | 1000                              | (P) F             | (L) F             |
| ICV                       | ↓           | ↓       | 758           | 210426A | 5/22           | 100                       | 102.1                             | (P) F             | (L) F             |
| CCV                       | Kim Appleby | ↓       | 1713          | 200902L | 9/21           | 1413                      | 1408                              | (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>/<br>Fail | Lab<br>/<br>Field |
|--------------------------|-------------|---------|---------------|---------|----------------|--------------------|------------|------------------------|--------|-------------------|-------------------|
| Calibr.                  | Brian Davis | 6/17/21 | 802           | 2012E39 | 12/22          | 7.00               | 23.8       | 7.01                   | -9.7   | (P) F             | (L) F             |
| Calibr.                  | ↓           | ↓       | 805           | 2103659 | 3/23           | 4.00               | 23.8       | 4.00                   | 167.8  | (P) F             | (L) F             |
| Calibr.                  | ↓           | ↓       | 807           | 2103F53 | 9/22           | 10.01              | 24.0       | 10.01                  | -182.6 | (P) F             | (L) F             |
| ICV                      | ↓           | ↓       | 810           | 2012E39 | 12/22          | 7.01               | 23.9       | 7.03                   | -9.2   | (P) F             | (L) F             |
| CCV                      | Kim Appleby | ✓       | 1718          | 2103659 | 3/23           | 4.00               | 24.3       | 4.15                   | 160.4  | (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  $-172.9$ , slope from 4 to 7  $+177.5$  (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: 5/18/21

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                         | Brian Davis | 6/17/21 | 813           | 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

**Date:** 6/17/2021  
**Customer:** NE-DIST  
**RQ:** RQ-2021-05-31-24

**Collected By:** Kimberly Appleby, Brian Davis  
**Sampling Agency:** FDEP  
**Project ID:** 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                                                                                |
|--------------------|------------------------------------------------------------------------------------------------|
| LAKE BROWARD South | <br>G2NE1218 |

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 6/17/2021  
1600EST

**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:** LAKE BROWARD South **Date:** 6/17/2021  
**WIN/Field ID:** G2NE1218 **WBID:** 2617A **ENR:** - **Latitude:** 29.5015  
**County:** PUTNAM **Org ID:** 21FLA **Longitude:** -81.59  
**Receiving Body of Water:** Lower St. Johns **RQ:** 2021-05-31-24

| Sampling Team Members               |                  | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-------------------------------------|------------------|-----------------|-------------------|---------------|--------------|--------------------|
| <input checked="" type="checkbox"/> | Kimberly Appleby |                 | x                 |               | x            | x                  |
| <input checked="" type="checkbox"/> | Brian Davis      | 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 type="checkbox"/> Pole                   |
| Depth measured with: Meter                           |                                                 |
| Secchi Equipment ID:                                 |                                                 |
| Collection Method                                    |                                                 |
| <input type="checkbox"/> Wading                      | <input checked="" type="checkbox"/> Canoe/Kayak |
| <input 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> YES                                                                                                                                                                                                                                                     |  | <b>Flow:</b> NA |  | <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>                                                                                                                                                                                                                                                          |  |                 |  |              |  |                                  |  |  |  |  |  |

## Duplicate Sample

|                             |              |                      |              |
|-----------------------------|--------------|----------------------|--------------|
| <b>Time Zone:</b> EST       | <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_DDDMMYYY) |
| <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: BD 07/07/2021  
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 BD 06/17/2021 Migrate Data to WIN: Verify Data in WIN: (Initials/Date) (Initials/Date)



RQ-2021-05-31-24

Customer: WQAP

Project ID: SMP

Collected By: Kimberly Appleby, Brian Davis

Field Report Prepared By: Kimberly Appleby

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G2NE1218

Location: LAKE BROWARD South

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> ) |
|-----------|-------------|-----------|-----------|------------|------|------------------|---------------------------------------------------|-----------------|--------------------|------------------------------|
| 6/17/2021 | 1445<br>EST | 7.06      | 91.7      | 29         | 6.35 | 0.3              | 2.2<br><input type="checkbox"/> VOB (S)           | 2.8             | 88.9               | 0.04                         |
|           | 1448        | 5.77      | 74        | 28.1       | 6.11 | 2.0              | Central Lab please use top row for login purposes |                 | 88.9               | 0.04                         |
|           | 1450<br>EST | 5.36      | 68.5      | 27.9       | 6.04 | 2.3              |                                                   |                 | 89.5               | 0.04                         |

| 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                     | A            |
|                                    | 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                     | A            |
|                                    | 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                     | A            |
|                                    | Filter Lot # RONB29490                                                                                                                                                                                |                                                                                    |                                        |                       |              |
|                                    | Syringe Lot #                                                                                                                                                                                         |                                                                                    |                                        |                       |              |
| Chlorophyll (BP-1L)                | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                                                        | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | A            |
| 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                     | A            |
| 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                     | A            |
| 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 checked="" type="checkbox"/> W-E8321-DI <input checked="" type="checkbox"/> W-E8321-MS                                                                                                         | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | A            |
| 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-TQ-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"/>                                                               | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
|                                    | DTM-QN-C <input type="checkbox"/> PRN-QN-C <input type="checkbox"/> PKD-QN-BV <input type="checkbox"/>                                                                                                |                                                                                    |                                        |                       |              |

Name:  
Kimberly Appleby  
Brian Davis

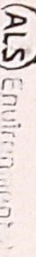
Signature:

Date:

06/17/21

\*2.0 ml of Preservative used unless noted otherwise.

\*\*MCAA: Monochloroacetic acid buffer solution



|      |                             |
|------|-----------------------------|
| SR # | Al S Contact Mandy Sullivan |
|------|-----------------------------|

Page 1 of 1

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