

# 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: 154177

RQ: 2019-09-09-32

Project: 2019SMP

- 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 07/19

| 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.            | Ben Harden | 09/23/19 | 0802       | 21.4    | 759.3           | 8.8             | 8.85            | 100.0 |              | 1.05160    | P / F       | D / F       |
| ICV                | "          | "        | 0817       | 20.7    | 759.3           | 9.0             | 8.94            | 99.9  |              |            | P / F       | D / F       |
| CCV                | "          | "        | 1340       | 21.1    | 758.1           | 8.9             | 8.98            | 100.9 |              |            | P / F       | D / 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.             | Ben Harden | 09/23/19 | 0804       | 190618E | 06/20       | 1000                   | 1000                        | P / F       | D / F       |
| ICV                 | "          | "        | 0805       | 290618A | 06/21       | 100.0                  | 102.2                       | P / F       | D / F       |
| CCV                 | "          | "        | 1342       | "       | "           | "                      | 100.6                       | P / F       | D / 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.            | Ben Harden | 09/23/19 | 0808       | 190618B | 12/20       | 7.02         | 20.2    | 7.02             | -20.1  | P / F       | D / F       |
| Calibr.            | "          | "        | 0811       | 190618A | 12/20       | 4.00         | 20.3    | 4.00             | 153.3  | P / F       | D / F       |
| Calibr.            | "          | "        | 0813       | 190618C | 12/20       | 10.05        | 20.6    | 10.05            | -187.1 | P / F       | D / F       |
| ICV                | "          | "        | 0814       | "       | "           | 10.05        | 20.4    | 10.05            | -186.7 | P / F       | D / F       |
| CCV                | "          | "        | 1343       | 190618A | 12/20       | 4.00         | 20.3    | 4.10             | 149.8  | P / F       | D / 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 10 167.0, slope from 4 to 7 173.9 (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: 07/19

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                   | Ben Harden | 09/23/19 | 0751       | 0.272                                     | 0.272             | P / F       | D / 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

January 2019

Data Qualified?  
Yes / No

WIN Station Name: Mt Sinai Slough @ E Windwood Way *W. Weeping Willow Way* Date: 9:23  
WIN/ Field ID: G1TLHR0104 *CB* G1TLHR0076 WBID: 919 Latitude: 30.42559 *30.4291*  
County: LEON ORG ID: 21FLTLHR Longitude: 84.17136 *84.1724*  
Receiving Body of Water: Lake Lafayette RQ: 2019-09-07-32

| Sampling Team Members |  |  |  |  | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-----------------------|--|--|--|--|-----------------|-------------------|---------------|--------------|--------------------|
| Paul Blair            |  |  |  |  |                 |                   |               |              |                    |
| Ben Harden            |  |  |  |  |                 |                   |               |              |                    |

| 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 _____                            |                                   |                               |  |
| Equipment ID _____                                   |                                   |                               |  |

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# 154177 Matrix: Fresh / Marine / DI  
Photos: Yes / No Flow: No Flow / Intertidal / Flowing / NA Tide: Rising/ Falling/ Slack/ NA Tide Times: High 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       | 10:05 | 0.5             | 0.25             | 0.5             | 0.97      | 11.3      | 5.96 | 6.03           | 66.3               | 25.0       |
| CEN       |       |                 |                  | S               |           |           |      |                |                    |            |

Biological Samples Collected: None 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 checked="" type="checkbox"/> H2SO4 | 9129100 | 5-9-20     | <input checked="" type="checkbox"/> <2 |
| Metals                      | <input type="checkbox"/> W-ICPMS <input type="checkbox"/> W-ICP                                                                                                                                                        | <input type="checkbox"/> Ice <input type="checkbox"/> HNO3                        |         |            | <input type="checkbox"/> <2            |
| Filtered Nutrients          | <input checked="" type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                                                                                                          | <input checked="" type="checkbox"/> Ice                                           |         |            |                                        |
| Chlorophyll                 | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                                                                         | <input checked="" type="checkbox"/> Ice                                           |         |            |                                        |
| Physical/Aggregate (Fresh)  | <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                                           |         |            |                                        |
| Physical/Aggregate (Marine) | <input type="checkbox"/> Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY                                                                                                                                                | <input 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 checked="" type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input 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 type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-DG3 <input type="checkbox"/> PCR-GFD       | <input type="checkbox"/> Ice                                                      |         |            |                                        |
| Tracers                     | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> W-E8321-MS                                                                                                                                                | <input type="checkbox"/> Ice                                                      |         |            |                                        |
| Pesticides                  | <input type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-CT-CL-R <input type="checkbox"/> W-E8321-DI<br><input type="checkbox"/> W-PCL-SQ-R <input type="checkbox"/> WE8321-MS <input type="checkbox"/> W-CARB-AA | <input type="checkbox"/> Ice                                                      |         |            |                                        |
| Phytoplankton               | <input type="checkbox"/> DTY-QN-C <input type="checkbox"/> PKD-QN-C                                                                                                                                                    | <input type="checkbox"/> Ice                                                      |         |            |                                        |

Notes:

Field/WIN →

Location ↓

Mt Sinai Slough @ Weeping Willow Way



G1TLHR0076

Signature: Paul Blair 9-23-19

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 CB 9-24-19 (Initials/Date) Migrate Data to WIN: (Initials/Date) Verify Data In WIN: (Initials/Date)



Florida Department of Environmental Protection  
Central Laboratory Submittal Form

Customer: TLH-ROC

Requester: Michael Eckles

Field Report Prepared By: Paul Blair

Project ID: SMP

Collected By: Blair/Harden

Sampling Agency: 8034

|              |             |                                       |              |         |               |                           |
|--------------|-------------|---------------------------------------|--------------|---------|---------------|---------------------------|
| Local        | Field/WIN → | Collection (comp begin or grab)       | Time         | Eastern | Composite end | Bottle Group(s)           |
| Field        | Location ↓  | Matrix (type, e.g., Salt, Fresh, etc) | Time         | Central | Date          | (See pg 2)                |
| WIN/         |             | Diss. Oxygen                          |              |         | mg/L          | Total Res. Chlorine       |
| Latitude     |             | Temp (C)                              | pH           |         | % sat         |                           |
|              |             | Salinity (ppt)                        | Sample Depth |         | ft            | Sp. Conductance (umho/cm) |
|              |             |                                       |              |         | m             |                           |
| Location     |             | Comments                              |              |         |               |                           |
| Field ID     |             | Collection (comp begin or grab)       | Time         | Eastern | Composite end | Bottle Group(s)           |
| WIN/STORET # |             | Matrix (type, e.g., Salt, Fresh, etc) | Time         | Central | Date          |                           |
| Latitude     |             | Diss. Oxygen                          |              |         | mg/L          | Total Res. Chlorine       |
|              |             | Temp (C)                              | pH           |         | % sat         |                           |
|              |             | Salinity (ppt)                        | Sample Depth |         | ft            | Sp. Conductance (umho/cm) |
|              |             |                                       |              |         | m             |                           |
| Location     |             | Comments                              |              |         |               |                           |
| Field ID     |             | Collection (comp begin or grab)       | Time         | Eastern | Composite end | Bottle Group(s)           |
| WIN/STORET # |             | Matrix (type, e.g., Salt, Fresh, etc) | Time         | Central | Date          |                           |
| Latitude     |             | Diss. Oxygen                          |              |         | mg/L          | Total Res. Chlorine       |
|              |             | Temp (C)                              | pH           |         | % sat         |                           |
|              |             | Salinity (ppt)                        | Sample Depth |         | ft            | Sp. Conductance (umho/cm) |
|              |             |                                       |              |         | m             |                           |
| Location     |             | Comments                              |              |         |               |                           |
| Field ID     |             | Collection (comp begin or grab)       | Time         | Eastern | Composite end | Bottle Group(s)           |
| WIN/STORET # |             | Matrix (type, e.g., Salt, Fresh, etc) | Time         | Central | Date          |                           |
| Latitude     |             | Diss. Oxygen                          |              |         | mg/L          | Total Res. Chlorine       |
|              |             | Temp (C)                              | pH           |         | % sat         |                           |
|              |             | Salinity (ppt)                        | Sample Depth |         | ft            | Sp. Conductance (umho/cm) |
|              |             |                                       |              |         | m             |                           |
| Location     |             | Comments                              |              |         |               |                           |
| Field ID     |             | Collection (comp begin or grab)       | Time         | Eastern | Composite end | Bottle Group(s)           |
| WIN/STORET # |             | Matrix (type, e.g., Salt, Fresh, etc) | Time         | Central | Date          |                           |
| Latitude     |             | Diss. Oxygen                          |              |         | mg/L          | Total Res. Chlorine       |
|              |             | Temp (C)                              | pH           |         | % sat         |                           |
|              |             | Salinity (ppt)                        | Sample Depth |         | ft            | Sp. Conductance (umho/cm) |
|              |             |                                       |              |         | m             |                           |
| Location     |             | Comments                              |              |         |               |                           |
| Field ID     |             | Collection (comp begin or grab)       | Time         | Eastern | Composite end | Bottle Group(s)           |
| WIN/STORET # |             | Matrix (type, e.g., Salt, Fresh, etc) | Time         | Central | Date          |                           |
| Latitude     |             | Diss. Oxygen                          |              |         | mg/L          | Total Res. Chlorine       |
|              |             | Temp (C)                              | pH           |         | % sat         |                           |
|              |             | Salinity (ppt)                        | Sample Depth |         | ft            | Sp. Conductance (umho/cm) |
|              |             |                                       |              |         | m             |                           |
| Location     |             | Comments                              |              |         |               |                           |

|                               |                    |                     |                              |                          |                         |
|-------------------------------|--------------------|---------------------|------------------------------|--------------------------|-------------------------|
| Relinquished By: Blair/Harden | Date/Time: 9-23-19 | Shipping Method: HD | Number of Coolers Shipped: 1 | Received By: [Signature] | Date/Time: 9/23/19 1328 |
|-------------------------------|--------------------|---------------------|------------------------------|--------------------------|-------------------------|

|          |              |                |                 |               |               |                                     |   |
|----------|--------------|----------------|-----------------|---------------|---------------|-------------------------------------|---|
| Group: A | Bottle Type: | P-1L           | # of Bottles: 3 | Preservative: | ICE           | Enter Number of Bottles Sent to Lab | 1 |
|          | ALKALINITY   |                |                 |               |               |                                     |   |
|          | TURBIDITY    |                |                 |               |               |                                     |   |
|          | W-CL-IC      |                |                 |               |               |                                     |   |
|          | W-COLOR      |                |                 |               |               |                                     |   |
|          | W-F          |                |                 |               |               |                                     |   |
|          | W-SO4-IC     |                |                 |               |               |                                     |   |
|          | W-TDS        |                |                 |               |               |                                     |   |
|          | W-TSS        |                |                 |               |               |                                     |   |
| Group: A | Bottle Type: | BP-1L          | # of Bottles: 3 | Preservative: | ICE           | Enter Number of Bottles Sent to Lab |   |
|          | CHLSUITE-W   |                |                 |               |               |                                     |   |
| Group: A | Bottle Type: | P-250ML-WO-THI | # of Bottles: 3 | Preservative: | ICE           | Enter Number of Bottles Sent to Lab |   |
|          | ECOL-18QT    |                |                 |               |               |                                     |   |
| Group: A | Bottle Type: | P-500ML        | # of Bottles: 3 | Preservative: | ICE And H2SO4 | Enter Number of Bottles Sent to Lab |   |
|          | W-NH3        |                |                 |               |               |                                     |   |
|          | W-NO2NO3     |                |                 |               |               |                                     |   |
|          | W-S-A-TP     |                |                 |               |               |                                     |   |
|          | W-TKN        |                |                 |               |               |                                     |   |
|          | W-TOC        |                |                 |               |               |                                     |   |
| Group: A | Bottle Type: | P-125ML        | # of Bottles: 3 | Preservative: | FILTER-ICE    | Enter Number of Bottles Sent to Lab | 1 |
|          | W-PO4-F      |                |                 |               |               |                                     |   |
| Group: B | Bottle Type: | P-1L           | # of Bottles: 1 | Preservative: | ICE           | Enter Number of Bottles Sent to Lab |   |
|          | ALKALINITY   |                |                 |               |               |                                     |   |
|          | TURBIDITY    |                |                 |               |               |                                     |   |
|          | W-BR-IC      |                |                 |               |               |                                     |   |
|          | W-F          |                |                 |               |               |                                     |   |
|          | W-TSS        |                |                 |               |               |                                     |   |
| Group: B | Bottle Type: | BP-1L          | # of Bottles: 1 | Preservative: | ICE           | Enter Number of Bottles Sent to Lab |   |
|          | CHLSUITE-W   |                |                 |               |               |                                     |   |
| Group: B | Bottle Type: | P-250ML-WO-THI | # of Bottles: 1 | Preservative: | ICE           | Enter Number of Bottles Sent to Lab |   |
|          | ENT-24-QT    |                |                 |               |               |                                     |   |
| Group: B | Bottle Type: | P-500ML        | # of Bottles: 1 | Preservative: | ICE And H2SO4 | Enter Number of Bottles Sent to Lab |   |
|          | W-NH3        |                |                 |               |               |                                     |   |

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