

# 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: Exo

RQ-

2021-12-27-27

Project:

Hillborough IMP RUN 7

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 10/04/21

| 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.            | F. Faria   | 12/28/21 | 0652       | 22.7    | 761.9           | 8.7             | 8.63            | 100.3 | -            | 1.075      | P / F       | L / F       |
| ICV                | I          | 1        | 0658       | 22.8    | 762.0           | 8.6             | 8.64            | 100.5 | -            | -          | P / F       | L / F       |
| CCV                | M. Maloney | 12-28-21 | 14:30      | 22.6    | 760.3           | 8.6             | 8.74            | 101.3 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | F. Faria   | 12/28/21 | 0705       | 1111994 | 11/23       | 1000                  | 1000                       | P / F       | L / F       |
| ICV                 | I          | 1        | 0708       | 2109K87 | 09/23       | 100                   | 98.9                       | P / F       | L / F       |
| CCV                 | M. Maloney | 12-28-21 | 14:30      | 1111994 | 11/23       | 1000                  | 999                        | 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.            | F. Faria   | 12/28/21 | 0715       | 213013 | 04/23       | 7.01         | 23.4    | 7.00             | -25.4  | P / F       | L / F       |
| Calibr.            | I          | 1        | 0717       | 214220 | 06/23       | 4.00         | 23.6    | 4.00             | 148.7  | P / F       | L / F       |
| Calibr.            | I          | 1        | 0720       | 210276 | 02/23       | 10.00        | 23.3    | 10.00            | -199.2 | P / F       | L / F       |
| ICV                | I          | 1        | 0724       | 1      | 1           | 1            | 23.1    | 1                | -      | P / F       | L / F       |
| CCV                | M. Maloney | 12-28-21 | 14:35      | 214220 | 06/23       | 4.00         | 24.07   | 4.11             | 142.9  | 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 10 173.8, slope from 4 to 7 174.1 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: meter 3; Date of last verification: 10/04/2021

| 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                   | F. Faria | 12/28/21 | 0730       | 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:

# 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: SWD

RQ- 2021-12-27-29

Project: Smp Run 7

- 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 10/04/2021

| 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.            | J. Yodanis | 12/18/21 | 0700       | 22.7    | 762             | 8.7             | 8.66            | 100.4 | -            | 1.008      | P / F       | L / F       |
| ICV                |            |          | 0705       | 22.8    | 762             | 8.6             | 8.66            | 100.4 | -            | -          | P / F       | L / F       |
| CCV                |            |          | 1445       | 25.7    | 760             | 8.2             | 8.18            | 100.3 | -            | -          | 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.             | J. Yodanis | 12/18/21 | 0710       | 1111994 | 11/23       | 1000                   | 1025                        | P / F       | L / F       |
| ICV                 |            |          | 0715       | 2109K87 | 09/23       | 100                    | 100.6                       | P / F       | L / F       |
| CCV                 |            |          | 1452       | 2109A45 | 08/23       | 50K                    | 49,987                      | 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.            | J. Yodanis | 12/18/21 | 0720       | 213013 | 04/23       | 7.01         | 23.5    | 7.00             | -32.9  | P / F       | L / F       |
| Calibr.            |            |          | 0725       | 214220 | 06/23       | 4.00         | 23.6    | 3.99             | 146.6  | P / F       | L / F       |
| Calibr.            |            |          | 0730       | 210276 | 02/23       | 10.02        | 23.4    | 9.95             | -208.0 | P / F       | L / F       |
| ICV                |            |          | 0735       | 210276 | 02/23       | 10.00        | 23.4    | 10.00            | -      | P / F       | L / F       |
| CCV                |            |          | 1500       | 213013 | 04/23       | 7.00         | 24.3    | 7.02             | -      | 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 10 175.1, slope from 4 to 7 179.5 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 2; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD RQ- 2021-12-27-21 Project: SMP

- 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 10/4/21

| 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.                  | M. Maloney | 12/27/21 | 7:20          | 22.8       | 763.7                  | 8.6                   | 8.65                  | 100.5 | -               | 1.01          | P / F             | L / F             |
| ICV                      | M. Maloney | 12/27/21 | 7:30          | 22.8       | 763.8                  | 8.6                   | 8.66                  | 100.6 | -               | -             | P / F             | L / F             |
| CCV                      | J. Yodanis | 12/27/21 | 1400          | 25.9       | 261                    | 8.1                   | 8.17                  | 100.7 | -               | -             | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|------------|----------|---------------|---------|----------------|--------------------------|----------------------------------|-------------------|-------------------|
| Calibr.                   | M. Maloney | 12/27/21 | 7:32          | 2104F69 | 04/23          | 10,000                   | 9,997                            | P / F             | L / F             |
| ICV                       | M. Maloney | 12/27/21 | 7:35          | 1111994 | 11/23          | 1,000                    | 1,034                            | P / F             | L / F             |
| CCV                       | J. Yodanis | 12/27/21 | 1409          | 2109A45 | 08/23          | 50K                      | 50,124                           | 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.                  | M. Maloney | 12/27/21 | 7:40          | 213013 | 04/23          | 7.01               | 22.5       | 7.13                   | -36.1 | P / F             | L / F             |
| Calibr.                  | M. Maloney | 12/27/21 | 7:42          | 214220 | 06/23          | 4.00               | 22.2       | 4.00                   | 146.1 | P / F             | L / F             |
| Calibr.                  | M. Maloney | 12/27/21 | 7:45          | 210276 | 02/23          | 10.00              | 22.4       | 10.03                  | -21.6 | P / F             | L / F             |
| ICV                      | M. Maloney | 12/27/21 | 7:46          | 210276 | 02/23          | 10.00              | 22.4       | 10.01                  | -21.1 | P / F             | L / F             |
| CCV                      | J. Yodanis | 12/27/21 | 1415          | 213013 | 04/23          | 7.0                | 24.7       | 7.01                   | -     | 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 10 125.5, slope from 4 to 7 162.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Sonber; Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:

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

Meter ID: Exo

RQ- 2021-12-20-28

Project: Hills Lake M. Lake

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

Mobley Ditch @ 70

Hudson Bayou Tidal Garden

- 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 10/04/21

| 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.            | F. Faria | 12/27/21 | 0656       | 22.5    | 763.3           | 8.7             | 8.69            | 100.4 | -            | 1.092      | P / F       | L / F       |
| ICV                |          |          | 0704       | 1       | 763.3           | 1               | 8.70            | 100.6 | -            | -          | P / F       | L / F       |
| CCV                |          |          | 1512       | 23.9    | 760.9           | 8.4             | 8.65            | 102.7 | -            | -          | 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.             | F. Faria | 12/27/21 | 0710       | 1111994 | 11/23       | 1000                   | 1000                        | P / F       | L / F       |
| ICV                 |          |          | 0717       | 2109K87 | 09/23       | 100                    | 99.8                        | P / F       | L / F       |
| CCV                 |          |          | 1517       | 2109A45 | 08/23       | 48600                  | 50K                         | 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.            | F. Faria | 12/27/21 | 0722       | 213013 | 04/23       | 7.01         | 22.3    | 7.01             | -23.8  | P / F       | L / F       |
| Calibr.            |          |          | 0725       | 214220 | 06/23       | 4.00         | 1       | 4.00             | 149.7  | P / F       | L / F       |
| Calibr.            |          |          | 0728       | 210276 | 02/23       | 10.00        | 22.4    | 10.00            | -197.6 | P / F       | L / F       |
| ICV                |          |          | 0729       | 1      | 1           | 1            | 22.3    | 1                | -      | P / F       | L / F       |
| CCV                |          |          | 1520       | 214220 | 06/23       | 4.00         | 24.6    | 4.08             | -      | 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 10 173.8, slope from 4 to 7 173.5 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi-Disk Line / Sonar Unique ID: Secchi 3; Date of last verification: 10/04/21

| 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                   | F. Faria | 12/27/21 | 0735       | 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:



# 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: SWD

RQ- 2021-12-13-30

Project: Smp Run 13

- 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 10/04/2021

| 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.            | <u>J. Yodzis</u> | <u>12/21/21</u> | <u>0700</u> | <u>22.4</u> | <u>755</u>      | <u>8.6</u>      | <u>8.61</u>     | <u>99.5</u> | <u>-</u>     | <u>1.004</u> | <u>P/F</u>  | <u>L/F</u>  |
| ICV                | <u>1</u>         | <u>1</u>        | <u>0705</u> | <u>22.6</u> | <u>755</u>      | <u>8.6</u>      | <u>8.60</u>     | <u>99.4</u> | <u>-</u>     | <u>-</u>     | <u>P/F</u>  | <u>L/F</u>  |
| CCV                | <u>1</u>         | <u>1</u>        | <u>1330</u> | <u>22.4</u> | <u>753</u>      | <u>8.6</u>      | <u>8.57</u>     | <u>99.6</u> | <u>-</u>     | <u>-</u>     | <u>P/F</u>  | <u>L/F</u>  |
| CCV                |                  |                 |             |             |                 |                 |                 |             |              |              | <u>P/F</u>  | <u>L/F</u>  |

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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------------|-----------------|-------------|----------------|--------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | <u>J. Yodzis</u> | <u>12/21/21</u> | <u>0710</u> | <u>1111994</u> | <u>11/23</u> | <u>1000</u>           | <u>1002</u>                | <u>P/F</u>  | <u>L/F</u>  |
| ICV                 | <u>1</u>         | <u>1</u>        | <u>0715</u> | <u>2109487</u> | <u>09/23</u> | <u>100</u>            | <u>99.2</u>                | <u>P/F</u>  | <u>L/F</u>  |
| CCV                 | <u>1</u>         | <u>1</u>        | <u>1335</u> | <u>2007074</u> | <u>07/22</u> | <u>500</u>            | <u>498.7</u>               | <u>P/F</u>  | <u>L/F</u>  |
| CCV                 |                  |                 |             |                |              |                       |                            | <u>P/F</u>  | <u>L/F</u>  |

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.            | <u>J. Yodzis</u> | <u>12/21/21</u> | <u>0720</u> | <u>213013</u> | <u>04/23</u> | <u>7.01</u>  | <u>22.9</u> | <u>6.98</u>      | <u>-29.0</u>  | <u>P/F</u>  | <u>L/F</u>  |
| Calibr.            | <u>1</u>         | <u>1</u>        | <u>0725</u> | <u>214220</u> | <u>06/23</u> | <u>4.00</u>  | <u>23.6</u> | <u>3.97</u>      | <u>146.8</u>  | <u>P/F</u>  | <u>L/F</u>  |
| Calibr.            | <u>1</u>         | <u>1</u>        | <u>0730</u> | <u>210276</u> | <u>02/23</u> | <u>10.02</u> | <u>23.0</u> | <u>10.01</u>     | <u>-205.6</u> | <u>P/F</u>  | <u>L/F</u>  |
| ICV                | <u>1</u>         | <u>1</u>        | <u>0735</u> | <u>210276</u> | <u>02/23</u> | <u>10.</u>   | <u>23.0</u> | <u>10.02</u>     | <u>-</u>      | <u>P/F</u>  | <u>L/F</u>  |
| CCV                | <u>1</u>         | <u>1</u>        | <u>1345</u> | <u>213013</u> | <u>04/23</u> | <u>7.0</u>   | <u>23.0</u> | <u>7.05</u>      | <u>-</u>      | <u>P/F</u>  | <u>L/F</u>  |
| CCV                |                  |                 |             |               |              |              |             |                  |               | <u>P/F</u>  | <u>L/F</u>  |

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 10 176.6, slope from 4 to 7 175.8 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 1; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | <u>P/F</u>  | <u>L/F</u>  |

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:

# 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: SGD EXO

RQ- 2021-12-20-32

Project: SMP

- 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 10/04/21

| 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.            | F. Faria | 12/21/21 | 0752       | 23.0    | 755.3           | 8.5             | 8.52            | 100.7 | -            | 1.063      | P / F       | L / F       |
| ICV                |          |          | 0755       | 23.0    | 755.4           |                 |                 | 99.5  | -            | -          | P / F       | L / F       |
| CCV                | K. Grace |          | 1546       | 22.1    | 753.2           | 8.6             | 8.67            | 99.5  | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | F. Faria | 12/21/21 | 0807       | 1111994 | 11/23       | 1000                  | 1000                       | P / F       | L / F       |
| ICV                 |          |          | 0809       | 2109K87 | 09/23       | 100                   | 100.5                      | P / F       | L / F       |
| CCV                 | K. Grace |          | 1548       | 1111994 | 11/23       | 1000                  | 996                        | P / F       | L / F       |
| CCV                 |          |          | 1550       | 2109K87 | 09/23       | 100                   | 96.6                       | 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.            | F. Faria | 12/21/21 | 0820       | 213013 | 04/23       | 7.00         | 22.9    | 7.00             | -22.2  | P / F       | L / F       |
| Calibr.            |          |          | 0825       | 214220 | 06/23       | 4.00         | 23.4    | 4.00             | 151.9  | P / F       | L / F       |
| Calibr.            |          |          | 0831       | 210276 | 02/23       | 10.00        | 22.9    | 10.00            | -196.6 | P / F       | L / F       |
| ICV                |          |          | 0832       |        |             |              |         |                  | -      | P / F       | L / F       |
| CCV                | K. Grace |          | 1554       | 214220 | 06/23       | 4.00         | 23.4    | 4.13             | -      | 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 10 174.4, slope from 4 to 7 174.1 (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: 10/04/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 1; Date of last verification: 10/04/21

| 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                   |      |      |            |                                           |                   | 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:



# 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: Exo

RQ- 2021-12-27-25

Project: SMP

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

10/04/21

| 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.            | K. Grace | 12/20/21 | 834        | 23.9    | 761.9           | 8.5             | 8.42            | 100.3 | -            | 1.079      | P / F       | L / F       |
| ICV                |          |          | 840        | 24.2    | 761.9           | 8.4             | 8.42            | 100.4 | -            | -          | P / F       | L / F       |
| CCV                |          |          | 1439       | 23.8    | 760.2           | 8.4             | 8.62            | 102.2 | -            | -          | 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.             | K. Grace | 12/20/21 | 843        | 2105835 | 04/23       | 5,000                  | 5,000                       | P / F       | L / F       |
| ICV                 |          |          | 846        | 2109K87 | 09/23       | 100                    | 102.5                       | P / F       | L / F       |
| CCV                 |          |          | 1442       | 2109A45 | 08/23       | 50K                    | 49,947                      | 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.            | K. Grace | 12/20/21 | 849        | 213013 | 04/23       | 7.01         | 24.0    | 7.01             | -76.20  | P / F       | L / F       |
| Calibr.            |          |          | 851        | 214220 | 06/23       | 4.00         | 24.1    | 4.00             | 149.80  | P / F       | L / F       |
| Calibr.            |          |          | 853        | 210276 | 02/23       | 10.01        | 23.9    | 10.01            | -199.50 | P / F       | L / F       |
| ICV                |          |          | 856        |        |             |              |         | 9.99             | -       | P / F       | L / F       |
| CCV                |          |          | 1445       | 213013 | 04/23       | 2.01         | 24.4    | 7.03             | -       | 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 10 173.3, slope from 4 to 7 176.0 (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: 10/04/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 1; Date of last verification: 10/04/21

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-12-27-23

Project: Smp

- 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 10/04/2021

| 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.            | J. Yodanis   | 12/20/21 | 0710       | 24.0    | 761             | 8.4             | 8.43            | 100.3 | -            | 1.0/29     | P / F       | L / F       |
| ICV                | 1            | 1        | 0715       | 24.1    | 761             | 8.4             | 8.43            | 100.3 | -            | -          | P / F       | L / F       |
| CCV                | Ben Pasquale |          | 1650       | 23.4    | 761             |                 | 8.57            | 100.7 |              |            | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodanis | 12/20/21 | 0720       | 111994  | 11/23       | 1000                  | 1002                       | P / F       | L / F       |
| ICV                 | 1          | 1        | 0725       | 2109K87 | 09/23       | 100                   | 99.8                       | P / F       | L / F       |
| CCV                 | BP         |          | 1652       | 2109A45 | 2/23        | 50,000                | 49054                      | 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.            | J. Yodanis | 12/20/21 | 0730       | 213013 | 04/23       | 7.01         | 23.8    | 7.02             | -31.0  | P / F       | L / F       |
| Calibr.            | 1          | 1        | 0735       | 214220 | 06/23       | 4.00         | 23.9    | 4.02             | 146.2  | P / F       | L / F       |
| Calibr.            | 1          | 1        | 0740       | 210276 | 02/23       | 10.01        | 23.8    | 9.99             | -206.3 | P / F       | L / F       |
| ICV                | 1          | 1        | 0745       | 210276 | 02/23       | 10.01        | 23.8    | 10.01            | -      | P / F       | L / F       |
| CCV                | BP         |          | 1654       | 213013 | 4/23        | 7.0          | 23.9    | 7.06             |        | 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 10 175.3, slope from 4 to 7 122.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 1; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Cnewy

RQ- 2021-12-20-09

Project: JMP

- 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 10/14/21

| 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.            | M. Maloney | 12-16-21 | 7:30       | 23.4    | 765.5           | 8.10            | 8.57            | 100.8 | -            | 1.01       | P / F       | L / F       |
| ICV                | M. Maloney | 12-16-21 | 7:35       | 23.5    | 765.5           | 8.60            | 8.59            | 101.1 | -            | -          | P / F       | L / F       |
| CCV                | N. Abdo    | 12/16/21 | 16:17      | 24.2    | 763.7           | 8.4             | 8.49            | 101.2 | -            | -          | 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.             | M. Maloney | 12-16-21 | 7:35       | 2104FL09 | 04/23       | 10,000                 | 10,001                      | P / F       | L / F       |
| ICV                 | M. Maloney | 12-16-21 | 7:40       | 1111994  | 11/23       | 1000                   | 1,024                       | P / F       | L / F       |
| CCV                 | N. Abdo    | +        | 1620       | 2109445  | 08/23       | 50,000                 | 50,048                      | 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.            | M. Maloney | 12-16-21 | 7:50       | 213013 | 04/23       | 7.00         | 24.0    | 6.90             | -1358 | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-16-21 | 7:55       | 214220 | 06/23       | 4.00         | 24.0    | 3.87             | 21.4  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-16-21 | 8:00       | 210276 | 02/23       | 10.00        | 23.9    | 10.03            | -2940 | P / F       | L / F       |
| ICV                | M. Maloney | 12-16-21 | 8:05       | 210276 | 02/23       | 10.00        | 23.8    | 9.90             | -2914 | P / F       | L / F       |
| CCV                | N. Abdo    | +        | 1630       | 214220 | 06/23       | 4.00         | 24.9    | 3.98             | 26.0  | 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 10 156.2, slope from 4 to 7 157.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Saber; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-12-13-50

Project: Smp Sci Nichols

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 10/04/2021

| 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.            | J. Yodzis | 12/16 | 0709       | 23.6    | 765             | 8.5             | 8.55            | 100.3 | -            | 1.0159     | P / F       | L / F       |
| ICV                | J         | 1     | 0705       | 23.6    | 765             | 8.5             | 8.55            | 100.5 | -            | -          | P / F       | L / F       |
| CCV                | J         | 1     | 1420       | 26.3    | 764             | 8.1             | 8.20            | 101.5 | -            | -          | 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.             | J. Yodzis | 12/16 | 0710       | 1111994 | 11/23       | 1000                   | 992                         | P / F       | L / F       |
| ICV                 | J         | 1     | 0715       | 2109K82 | 09/23       | 100                    | 99.9                        | P / F       | L / F       |
| CCV                 | J         | 1     | 1430       | 2007074 | 07/22       | 500                    | 491.3                       | 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.            | J. Yodzis | 12/16 | 0720       | 213013 | 04/23       | 7.01         | 24.1    | 7.02             | -30.7  | P / F       | L / F       |
| Calibr.            | J         | 1     | 0725       | 214220 | 06/23       | 4.00         | 24.1    | 3.99             | 147.7  | P / F       | L / F       |
| Calibr.            | J         | 1     | 0730       | 210276 | 02/23       | 10.01        | 24.0    | 10.03            | -207.8 | P / F       | L / F       |
| ICV                | J         | 1     | 0735       | 210276 | 02/23       | 10.00        | 24.0    | 10.01            | -      | P / F       | L / F       |
| CCV                | J         | 1     | 1440       | 210276 | 02/23       | 10.00        | 24.8    | 10.07            | -      | 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 10 177.1, slope from 4 to 7 178.4 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: EXD

RQ- 2021-12-06-13

Project: McKay bay-smp

- 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 10/04/2021

| 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.            | M. Maloney | 12-15-21 | 8:00       | 22.9    | 767.5           | 8.7             | 8.63            | 101.2 | -            | 1.08       | P / F       | L / F       |
| ICV                | M. Maloney | 12-15-21 | 8:30       | 23.3    | 767.7           | 8.6             | 8.79            | 103.2 | -            | -          | P / F       | L / F       |
| CCV                | M. Maloney | 12-15-21 | 14:55      | 28.7    | 764.7           | 7.8             | 7.94            | 102.5 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | M. Maloney | 12-15-21 | 8:15       | 2109A45 | 08/23       | 50.000                | 50.011                     | P / F       | L / F       |
| ICV                 | M. Maloney | 12-15-21 | 8:16       | 2104F69 | 04/23       | 10.000                | 10.034                     | P / F       | L / F       |
| CCV                 | M. Maloney | 12-15-21 | 15:00      | 2109A45 | 08/23       | 50.000                | 50.023                     | 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.            | M. Maloney | 12-15-21 | 8:20       | 213013 | 04/23       | 7.00         | 23.4    | 6.94             | -24.4  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-15-21 | 8:22       | 214220 | 06/23       | 4.00         | 23.4    | 3.90             | 150.3  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-15-21 | 8:28       | 210276 | 02/23       | 10.00        | 23.6    | 10.01            | -198.9 | P / F       | L / F       |
| ICV                | M. Maloney | 12-15-21 | 8:29       | 210276 | 02/23       | 10.00        | 23.6    | 9.99             | -198.2 | P / F       | L / F       |
| CCV                | M. Maloney | 12-15-21 | 15:00      | 213013 | 04/23       | 7.00         | 25.0    | 7.08             | -28.1  | 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 10 174.5, slope from 4 to 7 174.7 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Saber; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-12-13-49

Project: Smp

- 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 10/04/2021

| 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.                  | J. Yodzis  | 12/14    | 0730          | 23.9       | 768                    | 8.5                   | 8.51                  | 101.1 | -               | 1.0107        | P / F          | L / F          |
| ICV                      | 1          | 1        | 0735          | 24.1       | 768                    | 8.5                   | 8.51                  | 101.4 | -               | -             | P / F          | L / F          |
| CCV                      | M. Maloney | 12-14-21 | 15:11         | 25.9       | 710.6                  | 8.3                   | 8.26                  | 101.0 | -               | -             | 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. Yodzis  | <del>07/14</del> | 0740          | 111994  | 11/23          | 1000                      | 1003                              | P / F          | L / F          |
| ICV                       | 1          | 12/14            | 0745          | 2109K87 | 09/23          | 100                       | 100.9                             | P / F          | L / F          |
| CCV                       | M. Maloney | 12-14-21         | 15:15         | 2013E04 | 3/22           | 500                       | 509                               | 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. Yodzis  | 12/14    | 0750          | 213013 | 04/23          | 7.01               | 23.7       | 7.02                   | -30.5  | P / F          | L / F          |
| Calibr.                  | 1          | 1        | 0755          | 210273 | 02/23          | 4.00               | 23.9       | 3.97                   | 148.1  | P / F          | L / F          |
| Calibr.                  | 1          | 1        | 0800          | 210276 | 02/23          | 10.01              | 23.9       | 10.04                  | -207.1 | P / F          | L / F          |
| ICV                      | 1          | 1        | 0805          | 210276 | 02/23          | 10.01              | 23.9       | 10.00                  | -      | P / F          | L / F          |
| CCV                      | M. Maloney | 12-14-21 | 15:15         | 213013 | 04/23          | 7.00               | 24.3       | 7.17                   | -36.0  | 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 10 176.6, slope from 4 to 7 178.6 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 1; Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:



# 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: SWD

RQ: 2021-12-13-51

Project: SMP

- 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 10/4/21

| 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.            | M. Maloney | 12-13-21 | 7:30       | 23.7    | 768.0           | 8.0             | 8.56            | 101.1 | -            | 1.01       | P F         | L F         |
| ICV                | M. Maloney | 12-13-21 | 7:35       | 23.7    | 768.0           | 8.0             | 8.56            | 101.2 | -            | -          | P F         | L F         |
| CCV                | M. Maloney | 12-13-21 | 15:50      | 25.0    | 760.0           | 8.2             | 8.52            | 101.8 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | M. Maloney | 12-13-21 | 7:40       | 111994  | 11/23       | 1000                  | 1000                       | P F         | L F         |
| ICV                 | M. Maloney | 12-13-21 | 7:43       | 2109K87 | 09/23       | 100                   | 100.1                      | P F         | L F         |
| CCV                 | M. Maloney | 12-13-21 | 15:55      | 200504  | 03/22       | 500                   | 503                        | 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.            | M. Maloney | 12-13-21 | 7:45       | 213013  | 04/23       | 7.00         | 23.7    | 7.08             | -35.8  | P F         | L F         |
| Calibr.            | M. Maloney | 12-13-21 | 7:48       | 210273  | 02/23       | 4.00         | 23.8    | 3.96             | 148.0  | P F         | L F         |
| Calibr.            | M. Maloney | 12-13-21 | 7:50       | 2010E79 | 04/22       | 10.00        | 23.7    | 9.89             | -200.7 | P F         | L F         |
| ICV                | M. Maloney | 12-13-21 | 7:52       | 2010E79 | 04/22       | 10.00        | 23.7    | 9.95             | -202.0 | P F         | L F         |
| CCV                | M. Maloney | 12-13-21 | 16:00      | 213013  | 04/23       | 7.00         | 25.3    | 7.18             | -40.1  | 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 10 164.9 (both must be between 165 and 180 mV) 183.8 (both must be between 165 and 180 mV) Out of Range

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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 501000 Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-11-29-10

Project: McKay Tidal

- 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 10/04/21

| 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.            | <u>F. Faria</u> | <u>12/09/21</u> | <u>0712</u> | <u>23.2</u> | <u>762.9</u>    | <u>8.6</u>      | <u>8.51</u>     | <u>100.4</u> | -            | <u>1.018</u> | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| ICV                | <u>1</u>        | <u>1</u>        | <u>0713</u> | <u>23.3</u> | <u>762.8</u>    | <u>1</u>        | <u>1</u>        | <u>1</u>     | -            | -            | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                | <u>1</u>        | <u>1</u>        | <u>1516</u> | <u>27.5</u> | <u>762.7</u>    | <u>7.9</u>      | <u>7.97</u>     | <u>100.9</u> | -            | -            | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                |                 |                 |             |             |                 |                 |                 |              |              |              | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail         | Lab / Field         |
|---------------------|-----------------|-----------------|-------------|----------------|--------------|-----------------------|----------------------------|---------------------|---------------------|
| Calibr.             | <u>F. Faria</u> | <u>12/09/21</u> | <u>0721</u> | <u>2109A45</u> | <u>08/23</u> | <u>50K</u>            | <u>50010</u>               | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| ICV                 | <u>1</u>        | <u>1</u>        | <u>0723</u> | <u>2104F69</u> | <u>04/23</u> | <u>10K</u>            | <u>9977</u>                | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                 |                 |                 | <u>1524</u> | <u>2109A45</u> | <u>08/23</u> | <u>50K</u>            | <u>50120</u>               | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                 |                 |                 |             |                |              |                       |                            | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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.            | <u>F. Faria</u> | <u>12/09/21</u> | <u>0732</u> | <u>213013</u> | <u>04/23</u> | <u>7.00</u>  | <u>23.3</u> | <u>7.00</u>      | <u>-31.4</u>  | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| Calibr.            | <u>1</u>        | <u>1</u>        | <u>0739</u> | <u>214220</u> | <u>06/23</u> | <u>4.00</u>  | <u>23.4</u> | <u>4.00</u>      | <u>145.5</u>  | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| Calibr.            | <u>1</u>        | <u>1</u>        | <u>0744</u> | <u>210276</u> | <u>02/23</u> | <u>10.00</u> | <u>23.6</u> | <u>10.00</u>     | <u>-208.5</u> | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| ICV                | <u>1</u>        | <u>1</u>        | <u>0745</u> | <u>1</u>      | <u>1</u>     | <u>1</u>     | <u>23.5</u> | <u>1</u>         | -             | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                |                 |                 | <u>1530</u> | <u>213013</u> | <u>04/23</u> | <u>7.00</u>  | <u>24.3</u> | <u>6.98</u>      | -             | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                |                 |                 |             |               |              |              |             |                  |               | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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 10 172.1, slope from 4 to 7 176.9 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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:



# 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: Chewy

RQ- 2024-12-13-15

Project: + Bloom Response SMP Run 16

- 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 10/4/21

| 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.            | M. Maloney | 12-9-21 | 7:50       | 22.7    | 762.4           | 8.7             | 8.67            | 100.4 | -            | 1.005      | P / F       | L / F       |
| ICV                | M. Maloney | 12-9-21 | 7:55       | 22.7    | 763.0           | 8.7             | 8.68            | 100.0 | -            | -          | P / F       | L / F       |
| CCV                | K. Grace   | 1       | 1536       | 25.0    | 762.4           | 8.3             | 8.31            | 100.4 | -            | -          | 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.             | M. Maloney | 12-9-21 | 8:00       | 2104F09 | 04/23       | 10.000                 | 10.002                      | P / F       | L / F       |
| ICV                 | M. Maloney | 12-9-21 | 8:00       | 111994  | 11/23       | 1.000                  | 1.024                       | P / F       | L / F       |
| CCV                 | K. Grace   | 1       | 1540       | 2109A45 | 08/23       | 50K                    | 50.002                      | 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.            | M. Maloney | 12-9-21 | 8:05       | 213013 | 04/23       | 7.00         | 23.5    | 7.02             | -31.0  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-9-21 | 8:10       | 214220 | 06/23       | 4.00         | 23.5    | 4.01             | 146.2  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-9-21 | 8:15       | 210270 | 02/23       | 10.00        | 23.6    | 10.02            | -207.2 | P / F       | L / F       |
| ICV                | M. Maloney | 12-9-21 | 8:15       | 210270 | 02/23       | 10.00        | 23.6    | 10.00            | -206.8 | P / F       | L / F       |
| CCV                | K. Grace   | 1       | 1542       | 214220 | 06/23       | 9.00         | 24.5    | 4.09             | -      | 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 10 176.2, slope from 4 to 7 177.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Saber 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-12-13-14

Project: SMP

Sarasotta

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 10/04/21

| 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.            | F. Faria | 12/08/21 | 0733       | 22.1    | 762.9           | 8.8             | 8.75            | 100.4 | -            | 1.008      | (P) F       | (L) F       |
| ICV                |          |          | 0736       | 22.2    | 1               | 8.7             | 1               | 100.5 | -            | -          | (P) F       | (L) F       |
| CCV                |          |          | 1515       | 23.4    | 760.5           | 8.5             | 8.5             | 100.0 | -            | -          | (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.             | F. Faria | 12/08/21 | 0746       | 1111994 | 11/23       | 1000                   | 1000                        | (P) F       | (L) F       |
| ICV                 |          |          | 0750       | 2104F69 | 04/23       | 10K                    | 9758                        | (P) F       | (L) F       |
| CCV                 |          |          | 1520       | 2109A45 | 08/23       | 50K                    | 48991                       | (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.            | F. Faria | 12/08/21 | 0756       | 213013 | 04/23       | 7.00         | 22.8    | 7.00             | -32.2 | (P) F       | (L) F       |
| Calibr.            |          |          | 0800       | 214220 | 06/23       | 4.00         | 22.9    | 4.00             | 144.0 | (P) F       | (L) F       |
| Calibr.            |          |          | 0807       | 210276 | 02/23       | 10.00        | 22.7    | 10.00            | -29.9 | (P) F       | (L) F       |
| ICV                |          |          | 0808       | 1      | 1           | 1            | 1       | 1                | -     | (P) F       | (L) F       |
| CCV                |          |          | 1521       | 214220 | 06/23       | 4.00         | 23.7    | 4.01             | -     | (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 10 177.7, slope from 4 to 7 176.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Cherry

RQ: 2021-12-06-SS

Project: SNRP

- 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 10/04/21

| 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.                  | N. Abdo | 12/8/21 | 0752          | 22.3       | 762.6                  | 8.7                   | 8.6                   | 100.3 | —               | 1.01          | P/F               | L/F               |
| ICV                      | I       | I       | 0753          | 22.3       | 762.6                  | 8.7                   | 8.73                  | 100.4 | —               | —             | P/F               | L/F               |
| CCV                      | I       | I       | 1224          | 29.3       | 761.6                  | 8.4                   | 8.5                   | 102.0 | —               | —             | 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.                   | N. Abdo | 12/8/21 | 0755          | 1111994 | 11/23          | 1000                      | 995                               | P/F               | L/F               |
| ICV                       | I       | I       | 0758          | 2109581 | 07/23          | 100                       | 104.5                             | P/F               | L/F               |
| CCV                       | I       | I       | 1227          | 200707A | 07/22          | 500                       | 500                               | 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.                  | N. Abdo | 12/8/21 | 0801          | 213013 | 04/23          | 7.01               | 22.7       | 7.01                   | -31.7  | P/F               | L/F               |
| Calibr.                  | I       | I       | 0803          | 214220 | 06/23          | 4.00               | 22.8       | 3.99                   | 146.1  | P/F               | L/F               |
| Calibr.                  | I       | I       | 0805          | 210216 | 07/23          | 10.03              | 22.7       | 9.99                   | -202.0 | P/F               | L/F               |
| ICV                      | I       | I       | 0807          | I      | I              | I                  | 22.7       | 10.01                  | -206.2 | P/F               | L/F               |
| CCV                      | I       | I       | 1230          | 214220 | 06/23          | 400                | 23.2       | 4.05                   | 141.5  | 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 10 175.3, slope from 4 to 7 177.8 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Sabre 43; Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:

# 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: 50D

RQ- 2021-12-06-16

Project: SMP

- 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 10/04/2021

| 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.            | J. Yood215 | 12/07/21 | 0700       | 22.3    | 762             | 8.7             | 8.72            | 100.4 | -            | 10096      | P/F         | L/F         |
| ICV                |            |          | 0705       | 22.4    | 762             | 8.7             | 8.71            | 100.4 | -            | -          | P/F         | L/F         |
| CCV                |            |          | 1500       | 28.0    | 762             | 7.8             | 7.80            | 99.9  | -            | -          | 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.             | J. Yood215 | 12/07/21 | 0710       | 2105835 | 04/23       | 5K                     | 4918                        | P/F         | L/F         |
| ICV                 |            |          | 0715       | 1111994 | 11/23       | 1,000                  | 1012                        | P/F         | L/F         |
| CCV                 |            |          | 1505       | 2109A45 | 08/23       | 50K                    | 50072                       | 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.            | J. Yood215 | 12/07/21 | 0720       | 213013 | 04/23       | 7.01         | 22.7    | 7.02             | -39.0  | P/F         | L/F         |
| Calibr.            |            |          | 0725       | 214220 | 06/23       | 4.00         | 22.8    | 4.00             | 145.7  | P/F         | L/F         |
| Calibr.            |            |          | 0730       | 210276 | 02/23       | 10.03        | 22.8    | 10.04            | -206.6 | P/F         | L/F         |
| ICV                |            |          | 0735       | 210276 | 02/23       | 10.03        | 22.8    | 10.03            | -      | P/F         | L/F         |
| CCV                |            |          | 1510       | 213013 | 04/23       | 7.0          | 23.6    | 7.02             | -      | 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 10 176.6, slope from 4 to 7 175.7 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi-Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Chewy

RQ- 2021-12-06-42

Project: smp

- 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 10/04/21

| 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.            | M. Maloney | 12-7-21 | 7:30       | 22.3    | 7626            | 8.7             | 8.74            | 102.8 | -            | 1.03       | P / F       | L / F       |
| ICV                | M. Maloney | 12-7-21 | 7:35       | 22.3    | 7625            | 8.7             | 8.75            | 100.7 | -            | -          | P / F       | L / F       |
| CCV                | M. Maloney | 12-7-21 | 13:30      | 22.1    | 7622            | 8.8             | 8.95            | 102.4 | -            | -          | 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.             | M. Maloney | 12-7-21 | 7:40       | 1111994 | 11/23       | 1000                   | 1000                        | P / F       | L / F       |
| ICV                 | M. Maloney | 12-7-21 | 7:40       | 2109K87 | 09/23       | 100                    | 99.1                        | P / F       | L / F       |
| CCV                 | M. Maloney | 12-7-21 | 13:35      | 2007074 | 07/22       | 500                    | 480.0                       | 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.            | M. Maloney | 12-7-21 | 7:45       | 213013 | 04/23       | 7.00         | 22.7    | 7.03             | -31.2  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-7-21 | 7:45       | 214220 | 01/23       | 4.00         | 22.8    | 4.02             | 144.9  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-7-21 | 7:50       | 210276 | 02/23       | 10.00        | 22.8    | 10.05            | -208.3 | P / F       | L / F       |
| ICV                | M. Maloney | 12-7-21 | 7:50       | 210276 | 02/23       | 10.00        | 22.8    | 10.01            | -207.7 | P / F       | L / F       |
| CCV                | M. Maloney | 12-7-21 | 13:40      | 213013 | 04/23       | 7.00         | 23.3    | 7.05             | -33.8  | 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 10 177.1, slope from 4 to 7 176.1 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Saber 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ: 2021-11-29-26

Project: San Joaquin

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 10/04/2021

| 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.            | J. Yodzis | 12/06/21 | 0720       | 21.5    | 764             | 8.9             | 8.87            | 100.6 | -            | 1014       | P/F         | L/F         |
| ICV                |           |          | 0725       | 21.6    | 764             | 8.9             | 8.87            | 100.7 | -            | -          | P/F         | L/F         |
| CCV                |           |          | 1330       | 24.2    | 762             | 8.4             | 8.48            | 101.2 | -            | -          | 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.             | J. Yodzis | 12/06/21 | 0730       | 1111994 | 11/23       | 1000                   | 1036                        | P/F         | L/F         |
| ICV                 |           |          | 0735       | 1102792 | 01/23       | 100                    | 100.5                       | P/F         | L/F         |
| CCV                 |           |          | 1335       | 1102792 | 01/23       | 100                    | 99.8                        | 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.            | J. Yodzis | 12/06/21 | 0740       | 213013 | 04/23       | 7.01         | 22.1    | 7.02             | 29.8   | P/F         | L/F         |
| Calibr.            |           |          | 0745       | 214220 | 06/23       | 4.00         | 22.1    | 4.01             | 145.2  | P/F         | L/F         |
| Calibr.            |           |          | 0750       | 210276 | 02/23       | 10.03        | 22.1    | 10.04            | -205.8 | P/F         | L/F         |
| ICV                |           |          | 0755       | 210276 | 02/23       | 10.04        | 22.1    | 10.04            | -      | P/F         | L/F         |
| CCV                |           |          | 1340       | 213013 | 04/23       | 7.0          | 23.2    | 7.09             | -      | 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 10 126.0, slope from 4 to 7 175.0 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 2; Date of last verification: 10/04/21

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-12-13

Project: Smf McKay

- 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 10/4/21

| 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.                  | J. Yodzis    | 12/02/21 | 830           | 21.6       | 765                    | 8.9                   | 8.87                  | 100.7 | -               | 1.01          | P/F               | L/F               |
| ICV                      | 1            | 1        | 0835          | 21.7       | 765                    | 8.9                   | 8.86                  | 100.8 | -               | -             | P/F               | L/F               |
| CCV                      | Ben Paswater | 1        | 1620          | 26.1       | 763                    | 8.1                   | 8.13                  | 100.5 |                 |               | 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.                   | J. Yodzis | 12/02/21 | 0840          | 2109A45 | 08/23          | 50K                       | 50463                             | P/F               | L/F               |
| ICV                       | 1         | 1        | 0845          | 2104F69 | 04/23          | 10K                       | 10063                             | P/F               | L/F               |
| CCV                       | BP        | 1        | 1624          | 2109A45 | 8/23           | 50,000                    | 49942                             | 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.                  | J. Yodzis | 12/02/21 | 0850          | 213013 | 04/23          | 7.05               | 22.2       | 6.98                   | -30.8 | P/F               | L/F               |
| Calibr.                  | 1         | 1        | 0855          | 214220 | 06/23          | 4.00               | 22.4       | 3.98                   | 146.3 | P/F               | L/F               |
| Calibr.                  | 1         | 1        | 0900          | 210276 | 02/23          | 10.                | 22.4       | 9.92                   | -2050 | P/F               | L/F               |
| ICV                      | 1         | 1        | 0905          | 210276 | 02/23          | 10.                | 22.3       | 10.02                  | -     | P/F               | L/F               |
| CCV                      | BP        | 1        | 1626          | 213013 | 04/23          | 7.00               | 23.8       | 7.08                   | -34   | 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 10 174.2, slope from 4 to 7 172.1 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:

# 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: SWB

RQ- 2021-11-29-11

Project: SMP RUN

- 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 10/04/21

| 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.            | M. Maloney | 12-1-21 | 7:40       | 20.8    | 766.3           | 9.0             | 9.02            | 100.8 | -            | 1.005      | P / F       | L / F       |
| ICV                | M. Maloney | 12-1-21 | 7:50       | 20.8    | 766.4           | 9.0             | 9.02            | 100.8 | -            | -          | P / F       | L / F       |
| CCV                | M. Maloney | 12-1-21 | 15:00      | 23.4    | 764.2           | 8.10            | 8.55            | 100.6 | -            | -          | 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.             | M. Maloney | 12-1-21 | 7:50       | 2105835 | 04/23       | 5.000                  | 5002                        | P / F       | L / F       |
| ICV                 | M. Maloney | 12-1-21 | 7:55       | 1102792 | 01/23       | 100                    | 102.9                       | P / F       | L / F       |
| CCV                 | M. Maloney | 12-1-21 | 15:00      | 2109445 | 08/23       | 50.000                 | 50.329                      | 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.            | M. Maloney | 12-1-21 | 8:00       | 213013 | 04/23       | 7.00         | 21.4    | 7.09             | -35.6  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-1-21 | 8:00       | 214220 | 06/23       | 4.00         | 21.4    | 4.05             | 144.9  | P / F       | L / F       |
| Calibr.            | M. Maloney | 12-1-21 | 8:05       | 210276 | 02/23       | 10.00        | 21.3    | 10.00            | -208.8 | P / F       | L / F       |
| ICV                | M. Maloney | 12-1-21 | 8:05       | 210276 | 02/23       | 10.00        | 21.3    | 9.98             | -207.8 | P / F       | L / F       |
| CCV                | M. Maloney | 12-1-21 | 15:00      | 213013 | 04/23       | 7.00         | 22.3    | 6.98             | -30.9  | 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 10 173.2, slope from 4 to 7 180.5 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-11-22-35

Project: SMP Run

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 10/04/21

| 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.            | M. Maloney | <del>11/30/21</del> 11/30 | 7:40       | 20.7    | 765.2           | 9.0             | 9.08            | 100.7 | -            | 1.02       | P / F       | L / F       |
| ICV                | M. Maloney | 11/30/21                  | 7:49       | 20.7    | 765.3           | 9.0             | 9.09            | 101.4 | -            | -          | P / F       | L / F       |
| CCV                | M. Maloney | 11/30/21                  | 14:02      | 21.1    | 764.5           | 8.9             | 9.09            | 102.1 | -            | -          | 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. 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.             | M. Maloney | 11-30-21 | 7:45       | 2109A45 | 08/23       | 50.000                 | 50.019                      | P / F       | L / F       |
| ICV                 | M. Maloney | 11-30-21 | 7:45       | 2105835 | 04/23       | 5.000                  | 5.064                       | P / F       | L / F       |
| CCV                 | M. Maloney | 11-30-21 | 8:20       | 2007074 | 07/22       | 500                    | 506                         | P / F       | L / F       |
| CCV                 | M. Maloney | 11-30-21 | 14:05      | 1102792 | 01/23       | 100                    | 103.9                       | 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.            | M. Maloney | 11-30-21 | 7:54       | 213013 | 04/23       | 7.00         | 21.3    | 7.05             | -31.1  | P / F       | L / F       |
| Calibr.            | M. Maloney | 11-30-21 | 7:55       | 214220 | 06/23       | 4.00         | 21.2    | 3.99             | 147.1  | P / F       | L / F       |
| Calibr.            | M. Maloney | 11-30-21 | 8:00       | 210276 | 02/23       | 10.00        | 21.3    | 10.09            | -209.6 | P / F       | L / F       |
| ICV                | M. Maloney | 11-30-21 | 8:00       | 210276 | 02/23       | 10.00        | 21.3    | 9.99             | -208.2 | P / F       | L / F       |
| CCV                | M. Maloney | 11-30-21 | 14:06      | 213013 | 04/23       | 7.00         | 22.1    | 7.09             | -35.9  | 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 10 178.5, slope from 4 to 7 78.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: secchin#13; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: Sx0

RQ- 2021-11-22-36

Project: Run 8

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 10/04/2021

| 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.            | N. Abdo | 11/29/21 | 1232       | 24.1    | 762             | 8.9             | 8.42            | 98.9  | —            | 1.09       | P/F         | L/F         |
| ICV                | I       | I        | 1233       | 24.1    | 761.6           | 8.5             | 8.43            | 100.9 | —            | —          | P/F         | L/F         |
| CCV                | I       | I        | 1641       | 20.5    | 761             |                 | 9.26            | 102.2 | —            | —          | P/F         | L/F         |
| CCV                |         |          |            |         |                 |                 |                 | 103.0 |              |            | 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.             | N. Abdo | 11/29/21 | 1245       | 2105835 | 4/2023      | 500                    | 499.3                       | P/F         | L/F         |
| ICV                 | I       | I        | 1250       | 1102792 | 01/2023     | 100                    | 103.1                       | P/F         | L/F         |
| CCV                 | I       | I        | 1445       | 2007074 | 07/2022     | 500                    | 497.8                       | 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.            | N. Abdo | 11/29/21 | 1252       | 213013 | 04/2023     | 7.00         | 21.9    | 7.02             | -27.9  | P/F         | L/F         |
| Calibr.            | I       | I        | 1254       | 214220 | 06/2023     | 4.00         | 21.8    | 4.10             | 43.8   | P/F         | L/F         |
| Calibr.            | I       | I        | 1256       | 210276 | 02/2023     | 10.04        | 22.0    | 10.07            | -199.9 | P/F         | L/F         |
| ICV                | I       | I        | 1300       | 210276 | 02/2023     | I            | 22.0    | 10.02            | -199.1 | P/F         | L/F         |
| CCV                | I       | I        | 1450       | 214220 | 06/2023     | 4.00         | 22.9    | 4.10             | 138.4  | 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 10 172.0, slope from 4 to 7 171.7 (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: 10/04/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2022

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-11-22-35

Project: Smg Run 15

- 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 10/04/2021

| 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.            | J. Yodanis | 11/22/21 | 0700       | 22.5    | 760             | 8.7             | 8.67            | 100.3 | -            | 1.021      | P / F       | L / F       |
| ICV                |            |          | 0710       | 22.6    | 760             | 8.6             | 8.68            | 100.5 | -            | -          | P / F       | L / F       |
| CCV                |            |          | 1250       | 23.3    | 760             | 8.5             | 8.67            | 101.6 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodanis | 11/22/21 | 0715       | 2912986 | 11/21       | 5,000                 | 5056                       | P / F       | L / F       |
| ICV                 |            |          | 0720       | 2007074 | 07/22       | 500                   | 495.2                      | P / F       | L / F       |
| CCV                 |            |          | 1255       | 2007074 | 07/22       | 500                   | 498.0                      | 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.            | J. Yodanis | 11/22/21 | 0725       | 213013 | 04/23       | 7.01         | 22.7    | 6.98             | -29.1  | P / F       | L / F       |
| Calibr.            |            |          | 0730       | 210273 | 02/23       | 4.00         | 22.6    | 3.94             | 147.3  | P / F       | L / F       |
| Calibr.            |            |          | 0735       | 210276 | 02/23       | 10.03        | 22.8    | 10.02            | -206.0 | P / F       | L / F       |
| ICV                |            |          | 0742       | 210276 | 02/23       | 10.0         | 22.8    | 10.02            | -      | P / F       | L / F       |
| CCV                |            |          | 12130      | 213013 | 04/23       | 7.0          | 23.0    | 7.09             | -      | 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 10 176.9, slope from 4 to 7 176.4 (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: 10/04/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: 1000A SWD

RQ- 2021-11-01-70

Project: Smp Run

- 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 10/04/2021

| 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.                  | J. Yodzis  | 11/18/21 | 0700          | 22.9       | 765.0                  | 8.7                   | 8.65                  | 100.8 | ~               | 1.015         | P/F            | L/F            |
| ICV                      | 1          | 1        | 0705          | 23.0       | 765.0                  | 8.6                   | 8.66                  | 100.9 | -               | -             | P/F            | L/F            |
| CCV                      | M. Maloney | 11-18-21 | 15:45         | 23.2       | 703.9                  | 8.6                   | 8.65                  | 101.1 | -               | -             | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/ Fail | Lab<br>/ Field |
|---------------------------|------------|----------|---------------|----------|----------------|--------------------------|----------------------------------|----------------|----------------|
| Calibr.                   | J. Yodzis  | 11/18/21 | 0710          | 21C10045 | 9/13/22        | 50K                      | 49709                            | P/F            | L/F            |
| ICV                       | 1          | 1        | 0715          | 2104F69  | 04/23          | 10K                      | 10011                            | P/F            | L/F            |
| CCV                       | M. Maloney | 11-18-21 | 15:45         | 2109A45  | 08/23          | 50K                      | 49702                            | 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. Yodzis  | 11/18/21 | 0720          | 213013 | 04/23          | 7.01               | 23.3       | 7.03                   | -31.1  | P/F            | L/F            |
| Calibr.                  | 1          | 1        | 0720          | 210273 | 02/23          | 4.00               | 23.3       | 4.01                   | 145.6  | P/F            | L/F            |
| Calibr.                  | 1          | 1        | 0725          | 210276 | 02/23          | 10.02              | 23.4       | 10.03                  | -206.4 | P/F            | L/F            |
| ICV                      | 1          | 1        | 0735          | 210276 | 02/23          | 10.02              | 23.4       | 10.02                  | -      | P/F            | L/F            |
| CCV                      | M. Maloney | 11-18-21 | 15:55         | 213013 | 04/23          | 7.00               | 23.3       | 7.00                   | -      | 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 10 175.3, slope from 4 to 7 176.7 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/14/21

| 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                         |      |      |               |                                                 |                      | 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:



# 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: 220000 SWD

RQ- 2021-11-22-34

Project: Emp Run 13

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 10/04/21

| 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.                  | J. Yodzis  | 11/17/21 | 0710          | 19.8       | 766                    | 9.2                   | 9.18                  | 101.0 | -               | 1.029         | P/F               | L/F               |
| ICV                      | 1          | 1        | 0715          | 20.1       | 766                    | 9.1                   | 9.18                  | 101.1 | -               | -             | P/F               | L/F               |
| CCV                      | M. Maloney | 11-17-21 | 16:00         | 25.2       | 705                    | 8.3                   | 8.34                  | 101.2 | -               | -             | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|------------|----------|---------------|---------|----------------|--------------------------|----------------------------------|-------------------|-------------------|
| Calibr.                   | J. Yodzis  | 11/17/21 | 0720          | 2912986 | 11/21          | 5000                     | 4985                             | P/F               | L/F               |
| ICV                       | 1          | 1        | 0725          | 1102792 | 01/23          | 100                      | 103.4                            | P/F               | L/F               |
| CCV                       | M. Maloney | 11-17-21 | 16:00         | 2007074 | 07/22          | 500                      | 492.1                            | 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.                  | J. Yodzis  | 11/17/21 | 0730          | 213013 | 04/23          | 7.01               | 22.4       | 7.02                   | -31.7  | P/F               | L/F               |
| Calibr.                  | 1          | 1        | 0735          | 210273 | 02/23          | 4.00               | 22.4       | 4.03                   | 145.9  | P/F               | L/F               |
| Calibr.                  | 1          | 1        | 0740          | 210276 | 02/23          | 10.03              | 22.3       | 9.95                   | -205.0 | P/F               | L/F               |
| ICV                      | 1          | 1        | 0745          | 210276 | 02/23          | 10.0               | 22.3       | 10.02                  | -      | P/F               | L/F               |
| CCV                      | M. Maloney | 11-17-21 | 16:05         | 213013 | 04/23          | 7.00               | 22.5       | 7.03                   | -30.5  | 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 10 173.3, slope from 4 to 7 172.6 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Secchi #0; Date of last verification: 10/4/21

| 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                         |      |      |               |                                                 |                      | 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:

# 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: SWO

RQ: 2021-11-01-71

Project: SMP Run

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 10/04/21

| 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.            | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:15</u>  | <u>21.0</u> | <u>766.5</u>    | <u>8.9</u>      | <u>8.89</u>     | <u>100.9</u> | <u>-</u>     | <u>1.008</u> | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| ICV                | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:20</u>  | <u>21.0</u> | <u>766.5</u>    | <u>8.9</u>      | <u>8.89</u>     | <u>101.0</u> | <u>-</u>     | <u>-</u>     | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                | <u>M. Maloney</u> | <u>11-16-21</u> | <u>13:30</u> | <u>23.8</u> | <u>765.5</u>    | <u>8.5</u>      | <u>8.56</u>     | <u>101.0</u> | <u>-</u>     | <u>-</u>     | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                |                   |                 |              |             |                 |                 |                 |              |              |              | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail         | Lab / Field         |
|---------------------|-------------------|-----------------|--------------|----------------|--------------|-----------------------|----------------------------|---------------------|---------------------|
| Calibr.             | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:20</u>  | <u>2912986</u> | <u>11/21</u> | <u>5000</u>           | <u>5001</u>                | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| ICV                 | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:26</u>  | <u>1102792</u> | <u>01/23</u> | <u>100</u>            | <u>162.0</u>               | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                 | <u>M. Maloney</u> | <u>11-16-21</u> | <u>13:35</u> | <u>2007074</u> | <u>07/22</u> | <u>500</u>            | <u>490.3</u>               | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                 |                   |                 |              |                |              |                       |                            | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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.            | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:30</u>  | <u>213013</u> | <u>04/23</u> | <u>7.00</u>  | <u>22.4</u> | <u>7.00</u>      | <u>-33.9</u>  | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| Calibr.            | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:30</u>  | <u>210273</u> | <u>02/23</u> | <u>4.00</u>  | <u>22.1</u> | <u>4.00</u>      | <u>147.0</u>  | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| Calibr.            | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:30</u>  | <u>210276</u> | <u>02/23</u> | <u>10.00</u> | <u>22.2</u> | <u>10.00</u>     | <u>-205.5</u> | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| ICV                | <u>M. Maloney</u> | <u>11-16-21</u> | <u>7:35</u>  | <u>210276</u> | <u>02/23</u> | <u>10.00</u> | <u>22.2</u> | <u>9.97</u>      | <u>-206.5</u> | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                | <u>M. Maloney</u> | <u>11-16-21</u> | <u>13:40</u> | <u>213013</u> | <u>04/23</u> | <u>7.00</u>  | <u>22.7</u> | <u>7.14</u>      | <u>-38.2</u>  | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |
| CCV                |                   |                 |              |               |              |              |             |                  |               | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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 10 171.6, slope from 4 to 7 160.9 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line Sonar Unique ID: Secchi #1; Date of last verification: 10/04/21

| 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                   |      |      |            |                                           |                   | <u>P</u> / <u>F</u> | <u>L</u> / <u>F</u> |

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:



# 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: Leia

RQ- 2021-11-15-24

Project: Smg Ren 15

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 10/04/2021

| 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.            | J. Yodzis | 11/15/21 | 0710       | 21.7    | 765             | 8.9             | 8.85            | 100.8 | -            | 1.01%      | P/F         | L/F         |
| ICV                |           |          | 0720       | 21.8    | 765             | 8.8             | 8.85            | 100.9 | -            | -          | P/F         | L/F         |
| CCV                |           |          | 1420       | 22.9    | 764             | 8.6             | 8.71            | 101.5 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 11/15/21 | 0730       | 2912986 | 11/21       | 5,000                 | 5005                       | P/F         | L/F         |
| ICV                 |           |          | 0740       | 1102792 | 01/23       | 100                   | 102.3                      | P/F         | L/F         |
| CCV                 |           |          | 1430       | 2109445 | 08/23       | 50K                   | 49355                      | P/F         | L/F         |
| CCV                 |           |          | 1435       | 1102792 | 01/23       | 100                   | 101.3                      | 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.            | J. Yodzis | 11/15/21 | 0745       | 213013 | 04/23       | 7.01         | 22.4    | 7.04             | -29.2  | P/F         | L/F         |
| Calibr.            |           |          | 0750       | 210273 | 02/23       | 4.00         | 22.0    | 4.02             | 147.4  | P/F         | L/F         |
| Calibr.            |           |          | 0755       | 210276 | 02/23       | 10.03        | 22.2    | 10.03            | -204.0 | P/F         | L/F         |
| ICV                |           |          | 0800       | 210276 | 02/23       | 10.0         | 22.2    | 9.92             | -      | P/F         | L/F         |
| CCV                |           |          | 1445       | 213013 | 04/23       | 7.0          | 22.7    | 6.97             | -      | 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 10 175.4, slope from 4 to 7 176.6 (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: 10/04/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: Leia

RQ- 2021-11-08-48

Project: Smg Run 6

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

10/04/2021

| 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.                  | J. Yodzis | 11/08/21 | 0705          | 22.3       | 764                    | 8.7                   | 8.76                  | 100.8 | —               | 1.028         | P/F               | F                 |
| ICV                      |           |          | 0710          | 22.4       | 764                    | 8.7                   | 8.79                  | 101.2 | —               | —             | P/F               | F                 |
| CCV                      |           |          | 1400          | 25.3       | 764                    | 8.3                   | 8.44                  | 102.8 | —               | —             | P/F               | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|-----------|----------|---------------|---------|----------------|--------------------------|----------------------------------|-------------------|-------------------|
| Calibr.                   | J. Yodzis | 11/08/21 | 0715          | 2912986 | 11/2021        | 5,000                    | 5036                             | P/F               | F                 |
| ICV                       |           |          | 0720          | 1102792 | 01/23          | 100                      | 103.2                            | P/F               | F                 |
| CCV                       |           |          | 1415          | 1102792 | 01/23          | 100                      | 104.3                            | P/F               | 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.                  | J. Yodzis | 11/08/21 | 0725          | 213013 | 04/23          | 7.01               | 22.5       | 7.01                   | -28.5  | P/F               | F                 |
| Calibr.                  |           |          | 0732          | 210273 | 02/23          | 4.00               | 22.5       | 3.97                   | 148.8  | P/F               | F                 |
| Calibr.                  |           |          | 0740          | 210276 | 02/23          | 10.03              | 22.5       | 10.03                  | -204.3 | P/F               | F                 |
| ICV                      |           |          | 0745          | 210276 | 02/23          | 10.                | 22.4       | 10.02                  | —      | P/F               | F                 |
| CCV                      |           |          | 1425          | 213013 | 04/23          | 7.0                | 23.4       | 7.07                   | —      | P/F               | 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 10 175.8, slope from 4 to 7 176.9 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:



# 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: LCin

RQ- 2021-10-25-66

Project: SmpSciower Creek

- 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 10/04/2021

| 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.            | J. Yodzis | 11/01/21 | 0700       | 23.1    | 764             | 8.6             | 8.62            | 100.7 | -            | 1.0243     | P/F         | D/F         |
| ICV                |           |          | 0710       | 23.1    | 764             | 8.6             | 8.63            | 100.8 | -            | -          | P/F         | D/F         |
| CCV                |           |          | 1630       | 24.6    | 762             | 8.3             | 8.43            | 101.9 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 11/01/21 | 0715       | 2012A70 | 11/22       | 500                   | 499.1                      | P/F         | D/F         |
| ICV                 |           |          | 0720       | 1102792 | 01/23       | 100                   | 102.1                      | P/F         | D/F         |
| CCV                 |           |          | 1640       | 1102792 | 01/23       | 100                   | 103.2                      | 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.            | J. Yodzis | 11/01/21 | 0725       | 213013 | 04/2023     | 7.01         | 23.2    | 7.01             | -28.6  | P/F         | D/F         |
| Calibr.            |           |          | 0730       | 210273 | 02/23       | 4.00         | 23.0    | 4.06             | 146.8  | P/F         | D/F         |
| Calibr.            |           |          | 0735       | 210276 | 02/23       | 10.0         | 23.1    | 9.97             | -204.5 | P/F         | D/F         |
| ICV                |           |          | 0740       | 210276 | 02/23       | 10.          | 23.0    | 10.02            | -      | P/F         | D/F         |
| CCV                |           |          | 1650       | 213013 | 04/23       | 7.0          | 24.2    | 7.15             | -      | 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 10 175.9, slope from 4 to 7 175.9 (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: 10/04/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Secchi 8; Date of last verification: 10/04/21

| 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                   |      |      |            |                                           |                   | 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:

# 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: LCIA

RQ- 2021-11-01-15

Project: Smearumy

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 10/04/2021

| 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.            | J. Yodzis | 10/27/21 | 0715       | 23.6    | 757             | 8.4             | 8.45            | 99.7  | —            | 1.016      | P/F         | Q/F         |
| ICV                | f         | f        | 0720       | 23.6    | 757             | 8.4             | 8.46            | 99.9  | -            | -          | P/F         | Q/F         |
| CCV                | f         | f        | 1550       | 25.4    | 756             | 8.2             | 8.24            | 100.5 | -            | -          | P/F         | Q/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.             | J. Yodzis | 10/27/21 | 0725       | 2012A70 | 11/22       | 500                    | 497.3                       | P/F         | Q/F         |
| ICV                 | f         | f        | 0730       | 110279L | 01/23       | 100                    | 100.7                       | P/F         | Q/F         |
| CCV                 | f         | f        | 1555       | 2012A70 | 11/22       | 500                    | 509                         | P/F         | Q/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.            | J. Yodzis | 10/27/21 | 0735       | 210518F | 11/22       | 7.01         | 23.3    | 7.03             | -29.4  | P/F         | Q/F         |
| Calibr.            | f         | f        | 0740       | 210273  | 02/23       | 4.00         | 23.2    | 4.08             | 145.1  | P/F         | Q/F         |
| Calibr.            | f         | f        | 0745       | 210276  | 02/23       | 10.02        | 23.2    | 10.07            | -208.1 | P/F         | Q/F         |
| ICV                | f         | f        | 0752       | 210276  | 02/23       | 10.00        | 23.4    | 10.01            | —      | P/F         | Q/F         |
| CCV                |           |          | 1600       | 210518F | 11/22       | 7.00         | 24.2    | 7.09             | —      | P/F         | Q/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 10 178.1, slope from 4 to 7 174.5 (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: 10/14/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 152443; Date of last verification: 10/14/21

| 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                   |      |      |            |                                           |                   | 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:



# 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: Leia

RQ- 2021-09-13-25

Project: Smprun

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 10/04/2021

| 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.                  | J. Yodzis | 10/26/21 | 0655          | 22.5       | 758                    | 8.6                   | 8.64                  | 100.0 | -               | 1.013         | P/F            | L/F            |
| ICV                      |           |          | 0700          | 22.6       | 758                    | 8.6                   | 8.66                  | 100.2 | -               | -             | P/F            | L/F            |
| CCV                      |           |          | 1500          | 32.3       | 757                    | 7.2                   | 7.25                  | 99.5  | -               | -             | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/ Fail | Lab<br>/ Field |
|---------------------------|-----------|----------|---------------|---------|----------------|--------------------------|----------------------------------|----------------|----------------|
| Calibr.                   | J. Yodzis | 10/26/21 | 0710          | 2912986 | 11/2021        | 5,000                    | 4991                             | P/F            | L/F            |
| ICV                       |           |          | 0715          | 2012470 | 11/2022        | 500                      | 501                              | P/F            | L/F            |
| CCV                       |           |          | 1505          | 1102792 | 01/23          | 100                      | 103.3                            | 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. Yodzis | 10/26/21 | 0720          | 210518F | 11/22          | 7.01               | 22.4       | 6.96                   | -27.9  | P/F            | L/F            |
| Calibr.                  |           |          | 0725          | 210273  | 02/23          | 4.00               | 23.0       | 3.97                   | 148.5  | P/F            | L/F            |
| Calibr.                  |           |          | 0730          | 210276  | 02/23          | 10.02              | 23.1       | 9.98                   | -205.4 | P/F            | L/F            |
| ICV                      |           |          | 0735          | 210276  | 02/23          | 10.02              | 23.1       | 10.02                  | -      | P/F            | L/F            |
| CCV                      |           |          | 1515          | 210273  | 02/23          | 4.00               | 23.7       | 4.10                   | -      | 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 10 177.5, slope from 4 to 7 176.4 (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: 10/4/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3103; Date of last verification: 10/4/21

| 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                         |      |      |               |                                                 |                      | 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:

# 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: SWD

RQ- 2021-10-25-15

Project: SMP

- 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 10/04/21

| 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.            | M. Maloney | 10-25-21 | 7:40       | 23.0    | 759.8           | 8.0             | 8.57            | 100.0 | -            | 1.01       | P / F       | L / F       |
| ICV                | M. Maloney | 10-25-21 | 7:45       | 23.1    | 759.8           | 8.0             | 8.57            | 100.2 | -            | -          | P / F       | L / F       |
| CCV                | M. Maloney | 10-25-21 | 17:00      | 27.0    | 757.0           | 7.9             | 7.99            | 100.3 | -            | -          | 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.             | M. Maloney | 10-25-21 | 7:45       | 410641  | 04/23       | 1000                   | 1000                        | P / F       | L / F       |
| ICV                 | M. Maloney | 10-25-21 | 7:50       | 1102792 | 01/23       | 100                    | 100.3                       | P / F       | L / F       |
| CCV                 | M. Maloney | 10-25-21 | 17:00      | 23012AP | 11/22       | 500                    | 499.4                       | 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.            | M. Maloney | 10-25-21 | 7:50       | 210039 | 01/23       | 7.00         | 22.3    | 7.00             | -35.4  | P / F       | L / F       |
| Calibr.            | M. Maloney | 10-25-21 | 7:55       | 210273 | 02/23       | 4.00         | 22.5    | 4.00             | 147.0  | P / F       | L / F       |
| Calibr.            | M. Maloney | 10-25-21 | 8:00       | 210276 | 02/23       | 10.00        | 22.6    | 10.00            | -204.8 | P / F       | L / F       |
| ICV                | M. Maloney | 10-25-21 | 8:00       | 210276 | 02/23       | 10.00        | 22.6    | 9.97             | -204.5 | P / F       | L / F       |
| CCV                | M. Maloney | 10-25-21 | 17:10      | 210039 | 02/23       | 4.00         | 23.8    | 4.05             | 144.5  | P / F       | L / F       |
| CCV                |            |          |            | 210273 |             |              |         |                  |        | 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 10 169.4, slope from 4 to 7 182.4 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: secchi 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Leia

RQ- 2021-10-11-49

Project: Smp Ron

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 10/04/2021

| 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.            | J. Yodzis | 10/21/21 | 0700       | 23.6    | 764             | 8.5             | 8.54            | 100.8 | ~            | 1.0135     | P / F       | L / F       |
| ICV                |           |          | 0705       | 23.7    | 764             | 8.5             | 8.54            | 100.9 | -            | -          | P / F       | L / F       |
| CCV                |           |          | 1620       | 28.2    | 762             | 7.8             | 7.86            | 100.7 | ~            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 10/21/21 | 0715       | 4104641 | 04/23       | 1000                  | 1007                       | P / F       | L / F       |
| ICV                 |           |          | 0720       | 2012A70 | 11/2022     | 500                   | 498.2                      | P / F       | L / F       |
| CCV                 |           |          | 1630       | 2109A45 | 08/23       | 50K                   | 49289                      | P / F       | L / F       |
| CCV                 |           |          | 1635       | 202A70  | 4/22        | 500                   | 499.3                      | 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.            | J. Yodzis | 10/21/21 | 0725            | 2101B07            | 12/22            | 7.01         | 23.6    | 7.14             | -35.5  | P / F       | L / F       |
| Calibr.            |           |          | 0730            | 210273             | 02/23            | 4.00         | 23.6    | 3.99             | 149.4  | P / F       | L / F       |
| Calibr.            |           |          | 0735            | 210276             | 02/23            | 10.02        | 23.6    | 10.03            | -204.0 | P / F       | L / F       |
| ICV                |           |          | 0740            | 210276             | 02/23            | 10.00        | 23.7    | 9.97             | -      | P / F       | L / F       |
| CCV                |           |          | <del>1642</del> | <del>2012A70</del> | <del>11/22</del> |              |         |                  |        | P / F       | L / F       |
| CCV                |           |          | 1645            | 210273             | 02/23            | 4.00         | 24.5    | 4.09             | -      | 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 10 169.1, slope from 4 to 7 184.9 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: EXO

RQ- 2021-04-05-23

Project: SMP

- 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 10/4/21

| 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.            | M. Maloney | 10/21/21 | 7:45       | 24.0    | 764.1           | 8.5             | 8.49            | 100.5 | -            | 1.08       | P/F         | L/F         |
| ICV                | M. Maloney | 10/21/21 | 7:50       | 23.9    | 764.1           | 8.5             | 8.55            | 101.6 | -            | -          | P/F         | L/F         |
| CCV                | M. Maloney | 10/21/21 | 15:50      | 24.2    | 762.4           | 8.4             | 8.56            | 102.5 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|------------|----------|------------|----------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | M. Maloney | 10/21/21 | 7:55       | 410641   | 04/23       | 1000                  | 1000                       | P/F         | L/F         |
| ICV                 | M. Maloney | 10/21/21 | 8:20       | 1102792  | 01/23       | 100                   | 102.4                      | P/F         | L/F         |
| CCV                 | M. Maloney | 10/21/21 | 15:45      | 21091445 | 08/23       | 50.000                | 49.148                     | 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.            | M. Maloney | 10/21/21 | 8:33       | 210039 | 01/23       | 7.00         | 23.3    | 7.00             | -19.6  | P/F         | L/F         |
| Calibr.            | M. Maloney | 10/21/21 | 8:40       | 210273 | 02/23       | 4.00         | 23.6    | 4.00             | 192.0  | P/F         | L/F         |
| Calibr.            | M. Maloney | 10/21/21 | 8:40       | 210276 | 02/23       | 10.00        | 23.9    | 10.00            | -99.9  | P/F         | L/F         |
| ICV                | M. Maloney | 10/21/21 | 8:40       | 210276 | 02/23       | 10.00        | 23.9    | 10.00            | -174.9 | P/F         | L/F         |
| CCV                | M. Maloney | 10/21/21 | 15:45      | 210273 | 02/23       | 4.00         | 24.6    | 4.11             | 147.8  | 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 10 176.3, slope from 4 to 7 171.6 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Leia

RQ- 2021-10-11-49

Project: 5mp

- 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 10/04/2021

| 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.                  | J. Yodzis | 10/20/21 | 0645          | 23.2       | 765                    | 8.6                   | 8.61                  | 100.7 | -               | 1.0089        | P/F               | D/F               |
| ICV                      |           |          | 0650          | 23.2       | 765                    | 8.6                   | 8.61                  | 100.8 | -               | -             | P/F               | D/F               |
| CCV                      |           |          | 1450          | 26.1       | 765                    | 8.2                   | 8.18                  | 101.0 | -               | -             | 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.                   | J. Yodzis | 10/20/21 | 0655          | 2912986  | 11/2021        | 5,000                     | 4997                              | P/F               | D/F               |
| ICV                       |           |          | 0700          | 2012A70  | 11/2022        | 500                       | 498.6                             | P/F               | D/F               |
| CCV                       |           |          | 1455          | 11102792 | 01/23          | 100                       | 101.5                             | 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.                  | J. Yodzis | 10/20/21 | 0705          | 210039 | 01/23          | 7.01               | 23.9       | 7.02                   | -27.5  | P/F               | D/F               |
| Calibr.                  |           |          | 0725          | 210273 | 02/23          | 4.00               | 23.6       | 4.01                   | 148.9  | P/F               | D/F               |
| Calibr.                  |           |          | 0730          | 210276 | 02/23          | 10.01              | 23.8       | 10.03                  | -203.8 | P/F               | D/F               |
| ICV                      |           |          | 0735          | 210276 | 02/23          | 10.01              | 23.8       | 10.01                  | -      | P/F               | D/F               |
| CCV                      |           |          | 1504          | 210273 | 02/23          | 4.00               | 24.2       | 4.03                   | -      | 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 10 126.3, slope from 4 to 7 126.4 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:

# 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: SWD

RQ- 2021-10-11-48

Project: Smp Run 13

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 10/04/2021

| 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.            | J. Yodzis | 10/19/21 | 0700       | 23.7    | 763             | 8.5             | 8.50            | 100.5 | -            | 1.0101     | P / F       | L / F       |
| ICV                |           |          | 0705       | 23.8    | 763             | 8.5             | 8.50            | 100.7 | -            | -          | P / F       | L / F       |
| CCV                |           |          | 1545       | 27.8    | 762             | 7.9             | 7.90            | 100.5 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 10/19/21 | 0710       | 4104641 | 04/23       | 1000                  | 1000                       | P / F       | L / F       |
| ICV                 |           |          | 0715       | 1102792 | 01/23       | 100                   | 100.4                      | P / F       | L / F       |
| CCV                 |           |          | 1550       | 1102792 | 01/23       | 100                   | 104.3                      | 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.            | J. Yodzis | 10/19/21 | 0720       | 210039 | 01/23       | 7.01         | 23.6    | 7.00             | -26.6 | P / F       | L / F       |
| Calibr.            |           |          | 0725       | 210273 | 02/23       | 4.0          | 23.9    | 4.01             | 149.6 | P / F       | L / F       |
| Calibr.            |           |          | 0730       | 210276 | 02/23       | 10.0         | 23.8    | 9.99             | 203.1 | P / F       | L / F       |
| ICV                |           |          | 0735       | 210276 | 02/23       | 10.0         | 23.8    | 10.01            | -     | P / F       | L / F       |
| CCV                |           |          | 1558       | 210273 | 02/23       | 4.0          | 24.5    | 4.03             | -     | 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 10 176.5, slope from 4 to 7 176.2 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 04 3; Date of last verification: 10/04/2021

| 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                   |      |      |            |                                           |                   | 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:



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

Only "X" this box if there are quality data on this page

Meter ID: SWD

RQ- 2021-09-27-14

Project: Smg Run

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 10/04/21

| 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.                  | J. Yodzis | 10/18/21 | 650           | 23.2       | 762                    | 8.6                   | 8.56                  | 100.3 | -               | 1.038         | P/F            | L/F            |
| ICV                      |           |          | 0655          | 23.3       | 762                    | 8.6                   | 8.58                  | 100.4 | -               | -             | P/F            | L/F            |
| CCV                      |           |          | 1445          | 23.3       | 761                    | 7.9                   | 8.18                  | 103.2 | -               | -             | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/ Fail | Lab<br>/ Field |
|---------------------------|-----------|----------|---------------|---------|----------------|--------------------------|----------------------------------|----------------|----------------|
| Calibr.                   | J. Yodzis | 10/18/21 | 0700          | 4104641 | 04/23          | 1000                     | 986                              | P/F            | L/F            |
| ICV                       |           |          | 0708          | 1102792 | 01/23          | 100                      | 100.1                            | P/F            | L/F            |
| CCV                       |           |          | 1452          | 1102792 | 01/23          | 100                      | 100.9                            | P/F            | L/F            |
| CCV                       |           |          |               |         |                |                          |                                  | P/F            | L/F            |

Not properly bracketted

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. Yodzis | 10/18/21 | 0715          | 210039 | 01/23          | 7.0                | 23.0       | 6.94                   | -262.0  | P/F            | L/F            |
| Calibr.                  |           |          | 0720          | 210273 | 02/23          | 4.0                | 23.2       | 3.98                   | 149.6   | P/F            | L/F            |
| Calibr.                  |           |          | 0727          | 210276 | 02/23          | 10.0               | 23.1       | 9.92                   | -203.20 | P/F            | L/F            |
| ICV                      |           |          | 0735          | 210276 | 02/23          | 10.0               | 23.1       | 10.00                  | -       | P/F            | L/F            |
| CCV                      |           |          | 1500          | 210039 | 01/23          | 7.0                | 24.5       | 7.05                   | -       | 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 10 177.0, slope from 4 to 7 175.8 (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: 10/04/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3 Date of last verification: 10/04/2021

| 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                         |      |      |               |                                                 |                      | 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:

# 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: Lein

RQ: 2021-08-09-07

Project: Sm p Run

**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 06/28/2021

| 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.            | J. Yodzis | 09/27/21 | 0720       | 23.3    | 763             | 8.6             | 8.56            | 100.4 | -            | .96440     | P / F       | L / F       |
| ICV                |           |          | 0727       | 23.4    | 763             | 8.5             | 8.57            | 100.3 | -            | -          | P / F       | L / F       |
| CCV                |           |          | 1450       | 28.5    | 762             | 7.8             | 7.83            | 100.4 | -            | -          | 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.             | J. Yodzis | 09/27/21 | 0733       | 410444  | 04/23       | 1000                   | 985                         | P / F       | L / F       |
| ICV                 |           |          | 0740       | 1102792 | 01/23       | 100                    | 99.4                        | P / F       | L / F       |
| CCV                 |           |          | 1456       | 2012A70 | 11/22       | 500                    | 512                         | 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.            | J. Yodzis | 09/27/21 | 0744       | 210039 | 01/23       | 7.01         | 23.5    | 7.08             | -76.1  | P / F       | L / F       |
| Calibr.            |           |          | 0748       | 210273 | 02/23       | 4.00         | 23.6    | 4.08             | 93.2   | P / F       | L / F       |
| Calibr.            |           |          | 0752       | 210276 | 02/23       | 10.02        | 23.5    | 10.06            | -244.1 | P / F       | L / F       |
| ICV                |           |          | 0756       | 210276 | 02/23       | 10.01        | 23.5    | 10.00            | -      | P / F       | L / F       |
| CCV                |           |          | 1500       | 219039 | 01/23       | 7.0          | 26.0    | 7.02             | -      | 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 10 168.3, slope from 4 to 7 169.9 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 890 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Leia

RQ- 2021-09-20-23

Project: SMP

- 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 06/28/2021

| 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.            | N. Abdo      | 09/20/21 | 0825       | 20.6    | 760.8           | 9.0             | 8.95            | 100.7 | —            | —          | P / F       | L / F       |
| ICV                | 1            | 1        | 0834       | 21.0    | 761.0           | 8.9             | 8.94            | 100.3 | —            | —          | P / F       | L / F       |
| CCV                | Ben Perazich | 9/21     | 805        | 21.4    | 762             | 8.1             | 8.81            | 99.7  |              |            | 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.             | N. Abdo | 09/20/21 | 0842       | 4104641 | 04/23       | 1000                   | 1017                        | P / F       | L / F       |
| ICV                 |         | 1        | 0852       | 1102792 | 01/23       | 100                    | 103.3                       | P / F       | L / F       |
| CCV                 | Bp      | 9/21/21  | 807        | 2003E04 | 3/22        | 500                    | 512                         | 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.            | N. Abdo | 09/20/21 | 0857       | 210039 | 01/23       | 7.00         | 21.0    | 7.18             | -70.2  | P / F       | L / F       |
| Calibr.            |         | 09/20/21 | 0908       | 210273 | 02/23       | 4.00         | 21.4    | 4.15             | -101.5 | P / F       | L / F       |
| Calibr.            |         | 09/20/21 | 0921       | 210276 | 02/23       | 10.00        | 21.4    | 10.11            | -238.5 | P / F       | L / F       |
| ICV                |         | 09/20/21 | 0926       | ↓      | ↓           | ↓            | 21.4    | 9.95             | -235.8 | P / F       | L / F       |
| CCV                | Bp      | 9/21/21  | 810        | 210039 | 1/23        | 7.00         | 21.1    | 7.18             | -78    | 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 10 178, slope from 4 to 7 171 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: Leia

RQ: 2021-09-13-59

Project: Bloom and SLP

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 6/28/21

| 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.            | S Meyer  | 09/15/21 | 800        | 22.0    | 759.4           | 8.7             | 8.73            | 99.9 | —            | 0.9563     | P / F       | L / F       |
| ICV                |          |          | 0805       | 22.0    | 759.3           | 8.7             | 8.73            | 99.9 | —            | —          | P / F       | L / F       |
| CCV                | Ben Punt | ↓        | 1642       | 24.8    | 757             |                 | 7.93            | 99.3 |              |            | 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.             | S Meyer | 09/15/21 | 0810       | 410G41  | 04/2023     | 1000                   | 1000                        | P / F       | L / F       |
| ICV                 |         |          | 0815       | 2012703 | 11/2022     | 100                    | 98.6                        | P / F       | L / F       |
| CCV                 | BP      | ↓        | 1643       | 2003E04 | 3/22        | 500                    | 523                         | 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.            | S Meyer | 09/15/21 | 0825       | 210039 | 01/2023     | 7.           | 21.3    | 7.02             | -70.0  | P / F       | L / F       |
| Calibr.            |         |          | 0835       | 210273 | 02/2023     | 4.           | 22.0    | 4.00             | 99.3   | P / F       | L / F       |
| Calibr.            |         |          | 0840       | 210276 | 02/2023     | 10.          | 21.6    | 10.04            | -241.5 | P / F       | L / F       |
| ICV                |         |          | 0842       | 210276 | 02/2023     | 10           | 21.3    | 10.04            | -240.8 | P / F       | L / F       |
| CCV                | BP      | ↓        | 1645       | 210039 | 01/2023     | 7.0          | 22.4    | 7.14             | -77    | 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 10 171.5, slope from 4 to 7 169.3 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: Leia

RQ: 204-09-13-32

Project: SCIP

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 06/28/2021

| 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.            | N. Abdo   | 09/13/21 | 0710       | 22.1    | 764.7           | 8.22            | 8.78            | 99.5  | -            | 1.98       | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| ICV                | <u>L</u>  | <u>L</u> | 0715       | 22.1    | 764.7           | 8.22            | 8.79            | 100.7 | -            | -          | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| CCV                | J. Yodzis | <u>L</u> | 1515       | 22.1    | 762             | 8.00            | 8.11            | 101.9 | -            | -          | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> 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 $\mu$ mos/cm | Meter Reading $\mu$ mos/cm | Pass / Fail                           | Lab / Field                           |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|---------------------------------------|---------------------------------------|
| Calibr.             | N. Abdo   | 09/13/21 | 0720       | 2104F69 | 04/23       | 10K                   | 9980                       | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| ICV                 | <u>L</u>  | <u>L</u> | 0730       | 410A641 | 04/23       | 1000                  | 1060                       | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| CCV                 | J. Yodzis | <u>L</u> | 1522       | 2003E04 | 03/22       | 500                   | 516                        | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| CCV                 | <u>L</u>  | <u>L</u> | 1530       | 4104441 | 04/23       | 1000                  | 1042                       | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> 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.            | N. Abdo   | 09/13/21 | 0730       | 211039   | 01/23       | 7.00         | 21.6    | 7.09             | -68.6  | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| Calibr.            | <u>L</u>  | <u>L</u> | 0735       | 210273   | 02/23       | 4.00         | 21.8    | 4.09             | 105.8  | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| Calibr.            | <u>L</u>  | <u>L</u> | 0736       | 210276   | 02/23       | 10.04        | 21.8    | 10.14            | -241.8 | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| ICV                | <u>L</u>  | <u>L</u> | 0740       | <u>L</u> | <u>L</u>    | <u>L</u>     | 21.8    | 10.03            | -238.9 | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| CCV                | J. Yodzis | <u>L</u> | 1538       | 210039   | 01/23       | 7.00         | 23.2    | 7.18             | -      | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F |
| CCV                | <u>L</u>  | <u>L</u> | 1545       | 210039   | 01/23       | 7.00         | 23.2    | 7.09             | -      | <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> 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 10 173.2, slope from 4 to 7 174.4 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-09-06-S3

Project: Smp

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 6/28/21

| 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.            | J. Yodzis | 09/09/21 | 0715       | 22.2    | 759.0           | 8.7             | 8.69            | 99.9 | -            | 1.004      | Ⓟ/F         | Ⓟ/F         |
| ICV                |           |          | 0720       | 22.2    | 759.0           | 8.7             | 8.69            | 99.9 | -            | -          | Ⓟ/F         | Ⓟ/F         |
| CCV                |           |          | 1420       | 25.4    | 759.0           | 8.2             | 8.19            | 99.9 | -            | -          | Ⓟ/F         | Ⓟ/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.             | J. Yodzis | 09/09/21 | 0725       | 4104641 | 04/23       | 1000                   | 1008                        | Ⓟ/F         | Ⓟ/F         |
| ICV                 |           |          | 0735       | 1102792 | 01/23       | 100                    | 964                         | Ⓟ/F         | Ⓟ/F         |
| CCV                 |           |          | 1435       | 2105836 | 04/23       | 50,000                 | 49,818                      | Ⓟ/F         | Ⓟ/F         |
| CCV                 |           |          | 1442       | 4104641 | 04/23       | 1000                   | 1003                        | Ⓟ/F         | Ⓟ/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.            | J. Yodzis | 09/09/21 | 0740       | 210039 | 01/23       | 7.0          | 21.9    | 7.00             | -25.2  | Ⓟ/F         | Ⓟ/F         |
| Calibr.            |           |          | 0745       | 210273 | 02/23       | 4.0          | 22.1    | 4.00             | 150.8  | Ⓟ/F         | Ⓟ/F         |
| Calibr.            |           |          | 0750       | 210276 | 02/23       | 10.0         | 22.1    | 10.00            | -201.6 | Ⓟ/F         | Ⓟ/F         |
| ICV                |           |          | 0755       | 210276 | 02/23       | 10.0         | 22.1    | 10.00            | -      | Ⓟ/F         | Ⓟ/F         |
| CCV                |           |          | 1448       | 210039 | 01/23       | 7.0          | 23.1    | 7.01             | -      | Ⓟ/F         | Ⓟ/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 10 176.4, slope from 4 to 7 176.0 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk / Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-08-30-50

Project: SMP

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 06/28/21

| 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.            | K. Grace | 9/8/21 | 751        | 21.4    | 759.6           | 8.8             | 8.78            | 99.9  | -            | 1.021      | P/F         | L/F         |
| ICV                |          |        | 759        | 21.8    | 1               | 8.8             | 8.78            | 100.1 | -            | -          | P/F         | L/F         |
| CCV                |          |        |            |         |                 |                 |                 |       |              |            | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|----------|--------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | K. Grace | 9/8/21 | 801        | 4104641 | 04/23       | 1,000                 | 1,000                      | P/F         | L/F         |
| ICV                 |          |        | 803        | 1102792 | 01/23       | 100                   | 97.0                       | P/F         | L/F         |
| CCV                 |          |        | 1330       | 2012A70 | 11/22       | 500                   | 478.7                      | 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.            | K. Grace | 9/8/21 | 810        | 210039 | 01/23       | 7.02         | 21.4    | 7.02             | -26.0  | P/F         | L/F         |
| Calibr.            |          |        | 812        | 210273 | 02/23       | 4.00         | 21.5    | 4.00             | 150.2  | P/F         | L/F         |
| Calibr.            |          |        | 822        | 210276 | 02/23       | 10.04        | 21.5    | 10.04            | -203.7 | P/F         | L/F         |
| ICV                |          |        | 828        | 1      |             | 1            | 1       | 1                | -      | P/F         | L/F         |
| CCV                |          |        | 1347       | 210039 | 01/23       | 7.02         | 22.5    | 7.07             | -      | 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 10 177.7, slope from 4 to 7 176.2 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: Exo

RQ- 2021-08-30-52

Project: smg

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 06/28/2021

| 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.            | J. Yodzis | 09/02/21 | 0800       | 20.9    | 758             | 8.9             | 8.86            | 100.2 | -            | 1.084      | P/F         | L/F         |
| ICV                |           |          | 0805       | 1       | 758             | 8.9             | 8.82            | 100.2 | -            | -          | P/F         | L/F         |
| CCV                |           |          | 1435       | 20.6    | 758             | 9.0             | 9.06            | 100.5 | -            | -          | 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 $\mu$ mos/cm | Meter Reading $\mu$ mos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 09/02/21 | 0811       | 4104641 | 04/23       | 1000                  | 1020                       | P/F         | L/F         |
| ICV                 |           |          | 0814       | 1102792 | 01/23       | 100                   | 98.8                       | P/F         | L/F         |
| CCV                 |           |          | 1440       | 2012A70 | 11/22       | 500                   | 495.8                      | 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.            | J. Yodzis | 09/02/21 | 0821       | 210039 | 01/23       | 7.0          | 21.7    | 7.05             | -188.0 | P/F         | L/F         |
| Calibr.            |           |          | 0826       | 210273 | 02/23       | 4.0          | 21.7    | 4.00             | 153.9  | P/F         | L/F         |
| Calibr.            |           |          | 0831       | 210276 | 02/23       | 10.0         | 21.7    | 10.06            | -189.3 | P/F         | L/F         |
| ICV                |           |          | 0838       | 210276 | 02/23       | 10.0         | 21.7    | 9.99             | -      | P/F         | L/F         |
| CCV                |           |          | 1450       | 210039 | 01/23       | 7.0          | 22.5    | 7.11             | -      | 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 10 170.5, slope from 4 to 7 172.7 (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: 06/28/2021

If NO, what will be used? (circle one) Seichi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-08-30-51

Project: Smg

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 06/28/2021

| 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.            | J. Yodzis | 09/01/21 | 0728       | 19.3    | 758             | 9.2             | 9.19            | 99.8 | -            | 1.001      | P/F         | L/F         |
| ICV                |           |          | 0735       | 19.4    | 758             | 9.2             | 9.18            | 99.9 | -            | -          | P/F         | L/F         |
| CCV                |           |          | 1510       | 22.7    | 758             | 8.6             | 8.57            | 99.7 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 09/01/21 | 0740       | 4104641 | 04/23       | 1,000                 | 994                        | P/F         | L/F         |
| ICV                 |           |          | 0747       | 1102792 | 01/23       | 100                   | 99.2                       | P/F         | L/F         |
| CCV                 |           |          | 1520       | 2012A70 | 11/22       | 500                   | 498.6                      | 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.            | J. Yodzis | 09/01/21 | 0750       | 210039 | 01/23       | 7.0          | 20.3    | 6.95             | -25.3  | P/F         | L/F         |
| Calibr.            |           |          | 0755       | 210273 | 02/23       | 4.0          | 20.8    | 3.93             | 150.1  | P/F         | L/F         |
| Calibr.            |           |          | 0800       | 210276 | 02/23       | 10.0         | 21.0    | 9.97             | -202.3 | P/F         | L/F         |
| ICV                |           |          | 0805       | 210276 | 02/23       | 10.0         | 21.0    | 10.00            | -      | P/F         | L/F         |
| CCV                |           |          | 1527       | 210039 | 01/23       | 7.0          | 20.8    | 7.02             | -      | 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 10 177, slope from 4 to 7 175.4 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: 505

RQ- 2021-04-06-51

Project: Savanna

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 06/28/2021

| 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.            | J. Yodzis | 08/31/21 | 0737       | 19.8    | 758             | 9.1             | 9.10            | 99.8 | -            | 1.001      | P/F         | L/F         |
| ICV                |           |          | 0742       | 19.9    | 758             | 9.1             | 9.09            | 99.8 | -            | -          | P/F         | L/F         |
| CCV                |           |          | 1540       | 30.0    | 757             | 7.5             | 7.53            | 99.8 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | J. Yodzis | 08/31/21 | 0737       | 104641  | 04/23       | 1000                  | 1001                       | P/F         | L/F         |
| ICV                 |           |          | 0753       | 1102792 | 01/23       | 100                   | 100.7                      | P/F         | L/F         |
| CCV                 |           |          | 1550       | 2012A70 | 11/22       | 500                   | 499.8                      | 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.            | J. Yodzis | 08/31/21 | 0800       | 210039 | 01/23       | 7.0          | 20.2    | 7.08             | -  | P/F         | L/F         |
| Calibr.            |           |          | 0804       | 210273 | 02/23       | 4.0          | 20.5    | 4.06             | -  | P/F         | L/F         |
| Calibr.            |           |          | 0810       | 210276 | 02/23       | 10.0         | 20.6    | 10.08            | -  | P/F         | L/F         |
| ICV                |           |          | 0815       | 210276 | 02/23       | 10.0         | 20.6    | 10.03            | -  | P/F         | L/F         |
| CCV                |           |          | 1559       | 210039 | 01/23       | 7.0          | 20.8    | 6.99             | -  | P/F         | L/F         |
| CCV                |           |          | 1605       | 210276 | 02/23       | 10.0         | 20.7    | 10.02            | -  | 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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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: MV disappeared After water got on our sheet



# 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: SWD

RQ- 2021-06-07-62

Project: SMP

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 06/28/2021

| 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.            | J. Yodzis | 08/26/2021 | 0712       | 21.6    | 761.0           | 8.8             | 8.81            | 100.2 | -            | 1.001      | P/F         | L/F         |
| ICV                | 1         | 1          | 0717       | 21.7    | 761.0           | 8.8             | 8.81            | 100.2 | -            | -          | P/F         | L/F         |
| CCV                | K. Grace  | 1          | 1613       | 24.8    | 759.0           | 8.3             | 8.27            | 100.0 | -            | -          | 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.             | J. Yodzis | 08/26/2021 | 0721       | 4104641 | 04/23       | 1000                   | 977                         | P/F         | L/F         |
| ICV                 | 1         | 1          | 0726       | 1102792 | 01/23       | 100                    | 100.2                       | P/F         | L/F         |
| CCV                 | K. Grace  | 1          | 1608       | 2012A70 | 11/22       | 500                    | 490.4                       | 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 <u>150.4</u> | Pass / Fail | Lab / Field |
|--------------------|-----------|------------|------------|--------|-------------|--------------|---------|------------------|-----------------|-------------|-------------|
| Calibr.            | J. Yodzis | 08/26/2021 | 0730       | 210039 | 01/23       | 7.0          | 21.7    | 7.01             | -25.0           | P/F         | L/F         |
| Calibr.            | 1         | 1          | 0734       | 210273 | 02/23       | 4.0          | 21.9    | 4.02             | -25.0           | P/F         | L/F         |
| Calibr.            | 1         | 1          | 0740       | 210276 | 02/23       | 10.0         | 21.9    | 10.03            | -25.0           | P/F         | L/F         |
| ICV                | 1         | 1          | 0743       | 210276 | 02/23       | 10.0         | 21.9    | 10.00            | -               | P/F         | L/F         |
| CCV                | K. Grace  | 1          | 1610       | 210039 | 01/23       | 7.0          | 22.8    | 7.03             | -               | 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 10 176.8, slope from 4 to 7 178.9 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/29/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-08-23-5

Project: SMP

- 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 06/28/21

| 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.            | K. Grace | 8/25/21 | 821        | 22.1    | 761.9           | 8.8             | 8.75            | 100.2 | -            | 1.602      | P/F         | L/F         |
| ICV                |          |         | 823        | 22.1    | 761.7           | 8.8             | 8.74            | 100.2 | -            | -          | P/F         | L/F         |
| CCV                |          |         | 1542       | 24.6    | 760.2           | 8.3             | 8.39            | 100.6 | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|----------|---------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | K. Grace | 8/29/21 | 826        | 4104641 | 04/23       | 1,000                 | 1,000                      | P/F         | L/F         |
| ICV                 |          |         | 830        | 1102792 | 01/23       | 100                   | 100.3                      | P/F         | L/F         |
| CCV                 |          |         | 1534       | 2012A70 | 11/22       | 500                   | 496.9                      | 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.            | K. Grace | 8/25/21 | 833        | 210039 | 01/23       | 7.01         | 22.5    | 7.01             | -25.0  | P/F         | L/F         |
| Calibr.            |          |         | 838        | 210273 | 02/23       | 4.00         | 22.6    | 4.00             | 151.6  | P/F         | L/F         |
| Calibr.            |          |         | 841        | 210276 | 02/23       | 10.03        | 22.6    | 10.03            | -202.5 | P/F         | L/F         |
| ICV                |          |         | 843        |        |             |              | 22.6    | 10.04            | -      | P/F         | L/F         |
| CCV                |          |         | 1540       | 210039 | 01/23       | 7.01         | 22.7    | 7.03             | -      | 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 10 177.5, slope from 4 to 7 176.6 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-07-12-05

Project: PP SMP

- 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 06/28/21

| 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.            | F. Faria  | 08/24/21  | 0705       | 21.7    | 760.4           | 8.8             | 8.80            | 100.0 | -            | 0.998      | P / F       | L / F       |
| ICV                | 1         | 1         | 0706       | 1       | 1               | 1               | 1               | 100.1 | -            | -          | P / F       | L / F       |
| CCV                | J. Yodzis | 8/24/2021 | 1600       | 30.7    | 760.0           | 7.5             | 7.43            | 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.             | F. Faria  | 08/24/21 | 0719       | 1107B73 | 07/23       | 70K                    | 70005                       | P / F       | L / F       |
| ICV                 | 1         | 1        | 0723       | 2104F69 | 04/23       | 10K                    | 9816                        | P / F       | L / F       |
| CCV                 | J. Yodzis | 08/24/21 | 1615       | 1102792 | 01/23       | 100                    | 101.5                       | 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.            | F. Faria  | 08/24/21   | 0735       | 210039 | 01/23       | 7.02         | 21.6    | 7.02             | -26.2  | P / F       | L / F       |
| Calibr.            | 1         | 1          | 0744       | 210273 | 02/23       | 4.00         | 21.3    | 4.00             | 149.7  | P / F       | L / F       |
| Calibr.            | 1         | 1          | 0752       | 210276 | 1           | 10.00        | 21.5    | 10.00            | -202.4 | P / F       | L / F       |
| ICV                | 1         | 1          | 0755       | 1      | 1           | 1            | 1       | 1                | -      | P / F       | L / F       |
| CCV                | J. Yodzis | 08/24/2021 | 1620       | 210039 | 01/23       | 7.0          | 21.9    | 7.12             |        | 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 10 176.2, slope from 4 to 7 175.9 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: Leia

RQ: 2021-07-12-04

Project: SMP Run

- 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 06/28/21

| 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.            | F. Faria  | 08/23/21   | 0700       | 20.5    | 760.9           | 9.0             | 9.02            | 100.1 | -            | 0.952      | P/F         | L/F         |
| ICV                | 1         | 1          | 0703       | 1       | 761.0           | 1               | 1               | 100.2 | -            | -          | P/F         | L/F         |
| CCV                | J. Yodzis | 08/23/2021 | 1501       | 25.2    | 760.1           | 8.2             | 8.30            | 98.7  | -            | -          | 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.             | F. Faria  | 08/23/21   | 0713       | 2105836 | 04/23       | 50K                    | 4444                        | P/F         | L/F         |
| ICV                 | 1         | 1          | 0716       | 410464  | 04/23       | 100                    | 100.1                       | P/F         | L/F         |
| CCV                 | J. Yodzis | 08/23/2021 | 1510       | 2104792 | 04/23       |                        | 10004                       | P/F         | L/F         |
| CCV                 | 1         | 08/23/2021 | 1512       | 2104764 | 04/23       | 50,000                 | 50156                       | 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.            | F. Faria  | 08/23/21   | 0723       | 210039 | 01/23       | 7.00         | 19.9    | 7.00             | -55.5 | P/F         | L/F         |
| Calibr.            | 1         | 1          | 0734       | 210273 | 02/23       | 4.00         | 20.3    | 4.00             | 113.5 | P/F         | L/F         |
| Calibr.            | 1         | 1          | 0743       | 210276 | 1           | 10.00        | 20.4    | 10.00            | -27.6 | P/F         | L/F         |
| ICV                | 1         | 1          | 0744       | 1      | 1           | 1            | 1       | 10.01            | -     | P/F         | L/F         |
| CCV                | J. Yodzis | 08/23/2021 | 1520       | 210039 | 01/23       | 7.00         | 20.7    | 7.19             | -     | 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 10 172.1, slope from 4 to 7 169 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: E x 0

RQ- 2021-08-1653

Project: SNP

- 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 6/28/21

| 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.            | J. Yodanis | 8/18/21 | 0712       | 21.49   | 763.1           | 8.9             | 8.84            | 100.5 | -            | 1.07       | P/F         | L/F         |
| ICV                | J          | 1       | 0716       | 21.70   | 763.1           | 8.8             | 8.83            | 1     | -            | -          | P/F         | L/F         |
| CCV                | J          | 8/18/21 | 1630       | 26.2    | 761.7           | 8.1             | 8.20            | 101.5 | -            | -          | 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.             | J. Yodanis | 8/18/21 | 0720       | 2012A70 | 11/22       | 500                    | 501                         | P/F         | L/F         |
| ICV                 | J          | 8/18/21 | 0728       | 1102792 | 01/23       | 100                    | 101.5                       | P/F         | L/F         |
| CCV                 | J          | 8/18/21 | 1635       | 2105836 | 04/23       | 50 K                   | 49754                       | 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.            | J. Yodanis | 8/18/21 | 0733       | 210039 | 01/23       | 7.0          | 21.3    | 7.03             | -18.1  | P/F         | L/F         |
| Calibr.            | J          | 8/18/21 | 0736       | 210273 | 02/23       | 4.0          | 21.2    | 4.14             | 151.3  | P/F         | L/F         |
| Calibr.            | J          | 8/18/21 | 0740       | 210276 | 02/23       | 10.0         | 21.3    | 9.99             | -191.2 | P/F         | L/F         |
| ICV                | J          | 8/18/21 | 0743       | 210276 | 02/23       | 10.0         | 21.2    | 10.00            | -      | P/F         | L/F         |
| CCV                | J          | 8/18/21 | 1640       | 210039 | 01/23       | 7.0          | 22.7    | 6.94             | -      | 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 10 173.1, slope from 4 to 7 169.4 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/29/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: LEIA

RQ- 2021-08-16-21

Project: SMP

- 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

06/28/21

| 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. <sup>112</sup><br>mg/L | % DO | Probe<br>Charge | Probe<br>Gain | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|--------------------------|-----------|-----------|---------------|------------|------------------------|-----------------------|--------------------------------------|------|-----------------|---------------|-------------------|-------------------|
| Calibr.                  | K. Grace  | 8/16/21   | 709           | 20.7       | 759.9                  | 9.0                   | <del>99.9</del>                      | 99.9 | -               | 0.950         | P / F             | L / F             |
| ICV                      |           |           | 710           | 20.8       | 758.8                  | 8.9                   | 8.93                                 | 99.9 | -               | -             | P / F             | L / F             |
| CCV                      | J. Yodzis | 8/16/2021 | 1503          | 31.2       | 758.4                  | 7.4                   | 7.04                                 | 95.9 |                 |               | 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>$\mu$ hos/cm | Meter<br>Reading<br>$\mu$ hos/cm | Pass<br>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|-----------|-----------|---------------|---------|----------------|--------------------------|----------------------------------|-------------------|-------------------|
| Calibr.                   | K. Grace  | 8/16/21   | 713           | 4104941 | 04/23          | 1,000                    | 1,000                            | P / F             | L / F             |
| ICV                       |           |           | 717           | 1102792 | 01/23          | 100                      | 102.8                            | P / F             | L / F             |
| CCV                       | J. Yodzis | 8/16/2021 | 1510          | 2012A70 | 11/22          | 500                      | 495.5                            | 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.                  | K. Grace  | 8/16/21 | 725           | 210039 | 01/23          | 7.02               | 21.1       | 7.02                   | -56.0 | P / F             | L / F             |
| Calibr.                  |           |         | 728           | 210273 | 02/23          | 4.00               | 21.0       | 4.00                   | 114.9 | P / F             | L / F             |
| Calibr.                  |           |         | 732           | 210276 | 02/23          | 10.05              | 21.0       | 10.05                  | -22.8 | P / F             | L / F             |
| ICV                      |           |         | 734           |        |                |                    | 21.0       | 10.03                  | -     | P / F             | L / F             |
| CCV                      | J. Yodzis | 8/16/21 | 1515          | 210039 | 01/23          | 7.0                | 22.0       | 7.05                   | -     | 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 10 167.8, slope from 4 to 7 170.9 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                         |      |      |               |                                                 |                      | 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:



# 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: Leia

RQ- 2021-08-09-56

Project: LVI SMP+blomm

- 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 06/28/21

| 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.            | F. Faria | 08/12/21 | 0715       | 21.2    | 763.3           | 8.9             | 8.92            | 100.4 | -            | 0.943      | P / F       | L / F       |
| ICV                |          |          | 0716       | 1       | 763.4           | 1               | 8.93            | 100.5 | -            | -          | P / F       | L / F       |
| CCV                |          |          | 1547       | 28.8    | 762.0           | 7.7             | 7.63            | 98.8  | -            | -          | 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.             | F. Faria | 08/12/21 | 0726       | 4104641 | 04/23       | 1000                   | 1000                        | P / F       | L / F       |
| ICV                 |          |          | 0728       | 1102792 | 01/23       | 100                    | 100.9                       | P / F       | L / F       |
| CCV                 |          |          | 1550       | 4104641 | 04/23       | 1000                   | 1038                        | 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.            | F. Faria | 08/12/21 | 0737       | 210039 | 01/23       | 7.00         | 20.5    | 7.00             | -58.6  | P / F       | L / F       |
| Calibr.            |          |          | 0740       | 210273 | 02/23       | 4.00         | 1       | 4.00             | 114.4  | P / F       | L / F       |
| Calibr.            |          |          | 0750       | 210276 |             | 10.05        | 20.6    | 10.05            | -228.8 | P / F       | L / F       |
| ICV                |          |          | 0751       | 1      |             | 1            | 1       | 10.03            | -      | P / F       | L / F       |
| CCV                |          |          | 1613       | 210273 | 02/23       | 4.00         | 21.5    | 4.13             | -      | 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 10 170.2, slope from 4 to 7 173.0 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: Exo

RQ: 2021-08-09-81

Project: SMP

- 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 06/28/21

| 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.            | F. Faria     | 08/11/21 | 0754       | 21.4    | 763.8           | 8.9             | 8.85            | 100.7 | -            | 1.074      | P / F       | L / F       |
| ICV                | I            | ↓        | 0757       | 21.6    | 763.9           | 8.8             | 8.84            | 100.5 | -            | -          | P / F       | L / F       |
| CCV                | Ben Pasquero | ↓        | 1645       | 24.45   | 762             |                 | 8.43            | 101.0 |              |            | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | F. Faria | 08/11/21 | 0804       | 2105836 | 04/23       | 50K                   | 49998                      | P / F       | L / F       |
| ICV                 | I        | ↓        | 0810       | 2104F69 | ↓           | 10K                   | 9900                       | P / F       | L / F       |
| CCV                 | BP       | ↓        | 1647       | 4104G41 | 4/23        | 1,000                 | 1017                       | 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.            | F. Faria | 08/11/21 | 0813       | 210039 | 01/23       | 7.60         | 21.0    | 7.00             | -18.2  | P / F       | L / F       |
| Calibr.            | I        | ↓        | 816        | 210273 | 02/23       | 4.00         | 21.1    | 3.99             | 158.4  | P / F       | L / F       |
| Calibr.            | I        | ↓        | 818        | 210276 | ↓           | 10.00        | 21.2    | 10.02            | -19.9  | P / F       | L / F       |
| ICV                | I        | ↓        | 820        | ↓      | ↓           | ↓            | 21.3    | 10.01            | -198.5 | P / F       | L / F       |
| CCV                | BP       | ↓        | 1650       | 210039 | 1/23        | 7.00         | 22.2    | 7.17             | -29    | 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 10 180.6, slope from 4 to 7 176.6 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ: 2021-08-09-08

Project: SMP

- 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 06/28/21

| 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.                  | K. Grace | 8/9/21 | 755           | 20.5       | 763.2                  | 9.0                   | 9.02                  | 100.4 | -               | 0.996         | P/F               | L/F               |
| ICV                      |          |        | 759           | 20.7       |                        | 9.0                   | 9.01                  | 100.5 | -               | -             | P/F               | L/F               |
| CCV                      |          |        | 1443          | 23.9       | 762.5                  | 8.5                   | 8.44                  | 100.1 | -               | -             | 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>/<br>Fail | Lab<br>/<br>Field |
|---------------------------|----------|--------|---------------|---------|----------------|---------------------------|-----------------------------------|-------------------|-------------------|
| Calibr.                   | K. Grace | 8/9/21 | 801           | 4104641 | 04/23          | 1,000                     | 1,000                             | P/F               | L/F               |
| ICV                       |          |        | 804           | 1102792 | 01/23          | 100                       | 97.5                              | P/F               | L/F               |
| CCV                       |          |        | 1058          | 2012A70 | 11/22          | 500                       | 493.9                             | 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.                  | K. Grace | 8/9/21 | 805           | 210039 | 01/23          | 7.02               | 20.8       | 7.02                   | -25.4  | P/F               | L/F               |
| Calibr.                  |          |        | 808           | 210273 | 02/23          | 4.00               | 20.8       | 4.00                   | 150.8  | P/F               | L/F               |
| Calibr.                  |          |        | 811           | 210276 | 02/23          | 10.05              | 20.7       | 10.05                  | -202.4 | P/F               | L/F               |
| ICV                      |          |        | 813           |        |                |                    | 20.9       | 10.05                  | -      | P/F               | L/F               |
| CCV                      |          |        | 1101          | 210039 | 01/23          | 7.02               | 21.5       | 7.14                   | -      | 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 10 177.0, slope from 4 to 7 176.2 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                         |      |      |               |                                                 |                      | 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:

# 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: 250

RQ- 2021-08-09-89

Project: SMP

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 6/28/2021

| 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.            | N. Abdo | 08/04/2021 | 0824       | 21.1    | 760.4           | 8.9             | 8.91            | 102.1 | —            | 1.09       | P/F         | L/F         |
| ICV                | I       | I          | 0826       | 21.1    | 760.5           | 8.9             | 8.92            | 100.3 | —            | —          | P/F         | L/F         |
| CCV                | I       | I          | 1730       | 21.0    | 760.5           | 8.9             | 8.90            | 102.1 | —            | —          | 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. 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.             | N. Abdo | 08/04/2021 | 0828       | 2104F09 | 4/23        | 10K                    | 9645                        | P/F         | L/F         |
| ICV                 | I       | I          | 0832       | 2105834 | 4/23        | 20K                    | 19800                       | P/F         | L/F         |
| CCV                 | I       | I          | 1735       | 2104F09 | 4/23        | 10K                    | 9989                        | 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.            | N. Abdo | 08/04/2021 | 0840       | 210039 | 01/23       | 7.00         | 20.9    | 7.00             | -19.7  | P/F         | L/F         |
| Calibr.            | I       | I          | 0842       | 210273 | 02/23       | 4.00         | 21.0    | 4.00             | 155.0  | P/F         | L/F         |
| Calibr.            | I       | I          | 0845       | 210276 | 02/23       | 10.05        | 21.1    | 10.05            | -198.3 | P/F         | L/F         |
| ICV                | I       | I          | 0850       |        |             | I            | 21.1    | 10.04            | —      | P/F         | L/F         |
| CCV                | I       | I          | 1740       | 210039 | 01/23       | 7.00         | 20.0    | 7.01             | -19.8  | 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 10 178.6, slope from 4 to 7 174.7 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:



# 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: SWD

RQ- 2021-08-02-66

Project: PP SMP

- 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 06/28/21

| 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.            | F. Faria | 08/03/21 | 0700       | 21.6    | 760.7           | 8.8             | 8.81            | 100.1 | -            | 0.999      | P / F       | L / F       |
| ICV                | I        | 1        | 0703       | 21.7    | 760.8           | 1               | 1               | 1     | -            | -          | P / F       | L / F       |
| CCV                | K Grace  | 8/4/21   | 640        | 20.6    | 760.1           | 9.0             | 8.98            | 99.9  | -            | -          | 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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|-------------------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | F. Faria K. Grace | 08/03/21 | 0719       | 2105836 | 04/23       | 50K                   | 49998                      | P / F       | L / F       |
| ICV                 | +                 | 1        | 0720       | 1102292 | 01/23       | 100                   | 9953                       | P / F       | L / F       |
| CCV                 |                   | 8/4/21   | 645        | 4104441 | 04/23       | 1,000                 | 1,008                      | 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.            | F. Faria | 08/03/21 | 0728       | 210039 | 01/23       | 7.00         | 21.5    | 7.00             | -25.8  | P / F       | L / F       |
| Calibr.            | I        | 1        | 0738       | 210273 | 02/23       | 4.00         | 1       | 4.00             | 151.1  | P / F       | L / F       |
| Calibr.            | I        | 1        | 0743       | 210276 | 1           | 10.04        | 21.6    | 10.04            | -202.2 | P / F       | L / F       |
| ICV                | I        | 1        | 0744       | 1      | 1           | 1            | 21.5    | 10.03            | -      | P / F       | L / F       |
| CCV                | KG       | 1        | 648        | 210039 | 01/23       | 7.00         | 21.2    | 7.08             | -27    | 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 10 176.4, slope from 4 to 7 176.9 (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: 06/28/2021

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: 3; Date of last verification: 06/28/2021

| 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                   |      |      |            |                                           |                   | 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:

# 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: SWD

RQ- 2021-06-21-52

Project: SMP LVI

Mountain

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.            | F. Faria | 06/27/21 | 0715       | 21.1    | 759.9           | 8.9             | 8.89            | 100.0 | -            | 1.001      | (P) F       | (L) F       |
| ICV                |          |          | 0716       | 21.2    | 760.0           | 1               | 1               | 1     | -            | -          | (P) F       | (L) F       |
| CCV                |          |          |            | 30.0    | 760.6           | 7.6             | 7.52            | 99.4  | -            | -          | (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 $\mu$ hos/cm | Meter Reading $\mu$ hos/cm | Pass / Fail | Lab / Field |
|---------------------|----------|----------|------------|---------|-------------|-----------------------|----------------------------|-------------|-------------|
| Calibr.             | F. Faria | 06/27/21 | 0724       | 410641  | 04/23       | 1000                  | 1000                       | (P) F       | (L) F       |
| ICV                 |          |          | 0725       | 1102792 | 01/23       | 100                   | 98.6                       | (P) F       | (L) F       |
| CCV                 |          |          | 1340       | 2012A70 | 11/22       | 500                   | 495.5                      | (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.            | F. Faria | 06/27/21 | 0734       | 207368 | 12/22       | 7.00         | 20.8    | 7.00             | -28.2  | (P) F       | (L) F       |
| Calibr.            |          |          | 0738       | 210273 | 02/23       | 4.00         | 20.9    | 4.00             | 150.5  | (P) F       | (L) F       |
| Calibr.            |          |          | 0747       | 210276 |             | 10.00        |         | 10.00            | -201.1 | (P) F       | (L) F       |
| ICV                |          |          | 0748       |        |             |              |         | 9.99             | -      | (P) F       | (L) F       |
| CCV                |          |          | 1345       | 207368 | 12/22       | 7.00         | 21.4    | 7.13             | -      | (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 7 178.7 (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: 3; 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                   |      |      |            |                                           |                   | 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: