

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

Boldly "X" this box if there is qualified data on this name.

Meter ID:

Y51#4

RQ:

2018-04-23-24

Project:

Gannville South

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.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

4-10-2018

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	A. Kalmbacher	5-1-18	0750	22.5	8.66	8.65	100	51.2	0.88674	P/F	L/F
ICV			0755	22.6	8.64	8.63	99.8	51.2	0.88674	(P)F	(L)F
CCV	A. Kalmbacher	5-1-18	1650	22.6	8.64	8.55	99.2	50.2	0.88674	(P)F	(L)F
CCV										P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	A. Kalmbacher	5-1-18	0757	180321B	4/2019	1.000	1.000	P/F	L/F
ICV			0800	171129B	12/2018	100	100	(P)F	(L)F
CCV	A. Kalmbacher	5-1-18	1655	180321B	4/2019	1.000	1006	(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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	A. Kalmbacher	5-1-18	0803	2711C81	11/2019	7.0	7.00	-43.1	P/F	L/F
Calibr.			0805	2711517	10/2019	4.0	4.00	132.7	P/F	L/F
Calibr.			0807	2711527	4/2019	10.0	9.98	210.9	P/F	L/F
ICV			0810	2711C81	1/2019	7.00	7.01	-40.7	P/F	L/F
CCV	A. Kalmbacher	5-1-18	1659	2711517	10/2019	4.0	4.00 ^{AK}	134.9	P/F	L/F
CCV							3.97		P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 167.8, slope from 4 to 7 175.8 (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification 4/10/2018

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	A. Kalmbacher	5-1-18	0811	0.00	0.001	(P)F	(L)F

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

COMMENTS:

QC/Scanned BP 5/14/18 JP 5/4/18

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

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

Meter ID: YSI 71 RQ: 2018-04-23-22 Project: Gainesville

- 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.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 4/18

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	<u>JPam sh</u>	<u>5/1/18</u>	<u>715</u>	<u>22.6</u>	<u>8.64</u>	<u>8.64</u>	<u>100</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>J</u>	<u>2</u>	<u>716</u>	<u>22.6</u>	<u>8.64</u>	<u>8.63</u>	<u>100</u>	<u>-</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>B. Davis</u>	<u>5/1/18</u>	<u>1510</u>	<u>23.2</u>	<u>8.54</u>	<u>8.59</u>	<u>100.5</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 ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	<u>JPam</u>	<u>5/1/18</u>	<u>719</u>	<u>180321B</u>	<u>4/19</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>J</u>	<u>2</u>	<u>720</u>	<u>1470318</u>	<u>9/18</u>	<u>147</u>	<u>153</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>B. Davis</u>	<u>5/1/18</u>	<u>1515</u>	<u>180321B</u>	<u>4/19</u>	<u>1000</u>	<u>989</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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	<u>JPam</u>	<u>5/1/18</u>	<u>725</u>	<u>2711081</u>	<u>11/19</u>	<u>7.0</u>	<u>7.0</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>J</u>	<u>2</u>	<u>728</u>	<u>2711081</u>	<u>10/19</u>	<u>4.0</u>	<u>4.0</u>	<u>159.4</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>J</u>	<u>2</u>	<u>729</u>	<u>2711081</u>	<u>4/19</u>	<u>10.0</u>	<u>10.0</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>730</u>	<u>2711081</u>	<u>11/19</u>	<u>7.0</u>	<u>7.0</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV			<u>1515</u>	<u>2711081</u>	<u>4/19</u>	<u>10.0</u>	<u>9.98</u>	<u>-</u>	<u>P/F</u>	<u>L/F</u>
CCV									<u>P/F</u>	<u>L/F</u>

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth 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	<u>JPam</u>	<u>5/1/18</u>	<u>731</u>	<u>0.0</u>	<u>0.0</u>	<u>P/F</u>	<u>L/F</u>

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

COMMENTS:

BD 5/14/18 QC/Scanned JP 5/4/18