

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: YSI #3

RQ- 2017-12-18-06

Project: High Springs

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 L & C

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 10/7

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>B = V =</u>	<u>12/12/17</u>	<u>745</u>	<u>20.8</u>	<u>8.95</u>	<u>8.96</u>	<u>100.0</u>	<u>66.5</u>	<u>0.929</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>748</u>	<u>20.9</u>	<u>8.93</u>	<u>8.93</u>	<u>100</u>	<u>67.6</u>	<u>0.929</u>	<u>(P) F</u>	<u>(L) F</u>
CCV						<u>8.93</u>				<u>P / F</u>	<u>L / F</u>
CCV	<u>Brian Davis</u>	<u>12-12-17</u>	<u>1625</u>	<u>18.2</u>		<u>9.49</u>	<u>100.6</u>	<u>66.5</u>	<u>0.929</u>	<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>B = V =</u>	<u>12/12/17</u>	<u>753</u>	<u>171129A</u>	<u>12/18</u>	<u>1000</u>	<u>1000</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>755</u>	<u>81472017</u>	<u>3/18</u>	<u>147</u>	<u>148</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>Brian Davis</u>	<u>12-12-17</u>	<u>1630</u>	<u>17129A</u>	<u>2/18</u>	<u>1000</u>	<u>999</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>B = V =</u>	<u>12/12/17</u>	<u>801</u>			<u>7.0</u>	<u>7.0</u>	<u>-9.2</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.			<u>805</u>			<u>4.0</u>	<u>4.0</u>	<u>165.8</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.			<u>810</u>			<u>10.0</u>	<u>10.0</u>	<u>-182.8</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>812</u>			<u>P.O</u>	<u>7.0</u>	<u>-8.9</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>Brian Davis</u>	<u>12-12-17</u>	<u>1633</u>			<u>10.0</u>	<u>10.05</u>	<u>-184.7</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>B =</u>	<u>12/12/17</u>	<u>813</u>	<u>0.00</u>	<u>0.00</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:

B = 12/19/17

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: Quanta RQ- 2017-12-11-10 Project: BMAP Tribs

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

10/10/17

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.	N. Fredrick	12/12/17	0800	21.74	8.79	8.78	100	—	—	P/F	L/F
ICV	↓		0805	20.91	8.93	8.90	99	—	—	P/F	L/F
CCV	J. Purn	12/12/17	1232	20.9	8.93	8.88	97.1	—	—	P/F	L/F
CCV										P/F	L/F

DO Acceptance criteria from Table ± 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; 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 μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	N. Fredrick	12/12/17	0810	171129A	12/18	1,000	999	P/F	L/F
ICV	↓		811	81472017	3/18	147	149	P/F	L/F
CCV	J. Purn	12/12/17	1235	14132016	12/17	1413	1396	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.	N. Fredrick					7.0	7.0	—	P/F	L/F
Calibr.						4.0			P/F	L/F
Calibr.	N. Frederick	12/12/17	812	2704788	9/18	10.0	10.0	—	P/F	L/F
ICV	↓		813	2710816	9/19	4.0	3.92	—	P/F	L/F
CCV	J. Purn	12/12/17	814	2708860	7/19	7.0	7.06	—	P/F	L/F
CCV			1231						P/F	L/F

pH Acceptance criteria ± 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)

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						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:

BD 12/19/17