

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 # 3 YSI

RQ- 2017-01-09-18

Project Gville 3

- Notes: (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (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 03/04/2016 10/2017

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.	J.Pam	1/11/17	715	20.8	8.95	8.94	100	59.4		P	L
ICV	J	J	717	20.9	8.93	8.90	99.7	59.4		P	L
CCV	N. Fredenik	1/11/17	1225	18.49		9.34	99.7	59.4		P	F
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	J.Pam	1/11/17	718	11/17	16101A	1000	1000	P	
ICV	J	J	919	6/17	1413206	1413	1380	P	
CCV	J	11/11/17	1449	6/17	160616B	100	100	P	
CCV									

Report specific conductance as a whole number with no decimal figure.

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.	J.P	1/11/17	724	2608904	7/18	7.0	7.00	-18.6	P	L
Calibr.	J	J	0730	2605918	4/18	4.0	4.00	159.3	P	L
Calibr.	J	J	0735	2607973	1/18	10.0	9.98	-190.0	P	L
ICV			0740	2605918	4/18	4.0	3.99	159.3	P	L
CCV	J.Pam	1/11/17	1450	2607973	1/18	10.0	10.04	194.3	P	L
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU;

mV pH7 Range 0 $\pm$ 50;

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

mV pH 10 Range -180 $\pm$ 50;

Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

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

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Meter YSI # 4 RQ- 2017-01-09-15 Project Swansee 3

- Notes: (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (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 03/04/2016 11/2016

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.	PO Con	01/11/17	0715	21.9	7.45	9.29	100.0	57.4	0.96228	Pass	LAB
ICV	✓	✓	0725	22.1	8.72	8.72	99.9	57.4	0.96228	Pass	LAB
CCV	AKalmbacher	01/11/17	1500	21.2	8.88	8.94	100.9	58.4	0.96228	P	L
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	PO Con	01/11/17	0727	160616A	06/2017	1000	1000	Pass	LAB
ICV	✓	✓	0730	160616B	12/2016	100	104	Pass	LAB
CCV	AKalmbacher	01/11/17	1510	160616A	06/2017	1000	999	P	L
CCV									

Report specific conductance as a whole number with no decimal figure.

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.	PO Con	01/11/17	0735	2608904	07/2018	7.0	7.0	-4.0		
Calibr.				2605918	4/2018	4.0	4.0	173.3		
Calibr.				2607973	01/2018	10.0	9.99	-179.3		
ICV	✓	✓		2608904	7/2018	7.0	7.02	-4.9	P	L
CCV	AKalmbacher	01/11/17	1515	2608904	7/2018	7.0	7.03	-5.1	P	L
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification 11/2016

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air	AKalmbacher	1-11-2017	0805	0.000	0.00	P	L

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater