

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: 2018-07-23-26 Project: Craig C. Co.

- 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 _____

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.	B = V =	7/26/18	825	23.9	8.43	8.41	99.8	/	/	P F	L F
ICV	B = V =	6	826	24.1	8.40	8.39	99.9	/	/	P F	L F
CCV	A. K. Imbacher	7-26-18	1245	26.1	8.09	8.21	101.4		.	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	B = F	7/26/18	829			1000	1000	(P) F (L) F	
ICV			831			100	102	(P) F (L) F	
CCV	A. Kimbacher	7-26-18	1250	180711A	7/2019	11000	998	(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.	B = V -	7/26/18	837			7.0	7.0	-17.8	P / F	L / F
Calibr.			841			4.0	4.0	140.0	P / F	L / F
Calibr.			845			10.0	9.98	-170.1	P / F	L / F
ICV			848			7.0	7.03	-175	P / F	L / F
CCV	A. K. Imbacher	7-26-18	1253	2711927	4/2019	10.0	10.0	-170.8	P / F	L / F
CCV									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 10 162.3, slope from 4 to 7 157.8 (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 _____

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	B = V	7/26/18	850	0.00	0.00	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 QC/Scanned 8/1/18 JP 7/31/18

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 name.

Meter ID: DEPA154181

RQ: 2018-07-09-13

Project: Melrose Lake

- 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 07-12-18

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.	PO Connor	07-26-18	0659	24.2	8.38	8.38	100.0	-	-	(P) F	(L) F
ICV	V	V	0702	24.2	8.38	8.39	100.0	-	-	(P) F	(L) F
CCV	PO Connor	07-26-18	1433	24.9	8.27	8.23	99.4	-	-	(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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	PO Connor	07-26-18	0705	180711A	07-2019	1000	1000	(P) F	(L) F
ICV	V	V	0708	180321A	04-2019	100	101.8	(P) F	(L) F
CCV	PO Connor	07-26-18	1427	1470718	12-2018	147	151.2	(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.	PO Connor	07-26-18	0718	2803E45	03-2020	7.0	7.00	-9.8	(P) F	(L) F
Calibr.			0720	2803D38	03-2020	4.0	4.00	-	(P) F	(L) F
Calibr.			0723	2711521	04-2019	10.0	9.99	-182	(P) F	(L) F
ICV	V	V	0725	2803E45	03-2020	7.0	7.06	-11.0	(P) F	(L) F
CCV	PO Connor	07-26-18	1430	2803D38	03-2020	4.0	4.07	163.4	(P) F	(L) F
CCV									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 _____, 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 07-12-18

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: