

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: 01-15-21

RQ: 2018-01-22-11

Project: Interlachen

ESSR Const. Car

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 01-10-18

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	01-17-18	0715	21.8	8.77	8.74	100.0	—	—	(P/F) (L/F)	(L/F)
ICV	↓	↓	0720	21.8	8.77	8.75	100.1	—	—	(P/F) (L/F)	(L/F)
CCV	PO'Connor	01-17-18	1614	20.8	8.98	9.19	102.3	—	—	(P/F) (L/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.	PO'Connor	01-17-18	0725	171129A	12-2018	1000	1000	(P/F) (L/F)	(L/F)
ICV	↓	↓	0727	170315A	03-2018	100	99	(P/F) (L/F)	(L/F)
CCV	PO'Connor	01-17-18	1617	170315A	03-2018	100	99	(P/F) (L/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	01-17-18	0728	2708B60	07-2019	7.0	7.00	—	(P/F) (L/F)	(L/F)
Calibr.	↓	↓	0730	2711517	10-2019	4.0	4.00	—	(P/F) (L/F)	(L/F)
Calibr. ICV	↓	↓	0733	2706D31	12-2018	10.0	9.95	—	(P/F) (L/F)	(L/F)
ICV	PO'Connor	01-17-18	1620	2708B60	07-2019	7.00	6.99	—	(P/F) (L/F)	(L/F)
CCV	PO'Connor	01-17-18	1625	2711517	10-2019	4.00	4.01	—	(P/F) (L/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 _____

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	N/A					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:

QA/Scanned 5/25/18

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 #3

RQ: 2018-01-22-11

Project: LSJR Coast

- 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 1/10/2018

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.	AKalmbacher	1-17-18	1040	20.3	9.03	9.03	100	63.5	0.9095	P/F	L/F
ICV		↓	1045	20.6	8.98	8.92	99	63.5	0.9095	<u>(P)</u> F	<u>(L)</u> F
CCV	AKalmbacher	1-17-18	1535	16.7	9.72	9.68	99.8	61.4	0.9095	<u>(P)</u> F	<u>(L)</u> 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.	AKalmbacher	1-17-18	1050	171129A	12/2018	1,000	1,000	P/F	L/F
ICV		↓	1053	1124820	6/2018	21,820	21,854	<u>(P)</u> F	<u>(L)</u> F
CCV	AKalmbacher	1-17-18	1537	171129A	2/2018	1,000	1,005	<u>(P)</u> F	<u>(L)</u> 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.	AKalmbacher	1-17-18	1055	2708860	7/2019	7.0	7.00	-14.7	P/F	L/F
Calibr.		↓	1057	2711517	10/2019	4.0	4.00	163.2	P/F	L/F
Calibr.		↓	1100	2706031	12/2018	10.0	9.99	-187.3	P/F	L/F
ICV		↓	1104	2708860	7/2019	7.0	7.02	-13.6	<u>(P)</u> F	<u>(L)</u> F
CCV	AKalmbacher	↓	1540	2706031		10.0	10.04	-190.5	<u>(P)</u> F	<u>(L)</u> 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 1/10/2018

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	AKalmbacher	1-17-18	1105	0.000	0.000	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:

QA/Scanned BT 1/25/18