

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: 15T 3

RQ: 2018-06-04-32

Project: Interlachen 2

- 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

4/2018

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.	J Parnish	6/20/18	718	24.1	8.40	8.40	100.1	-	-	P/F	L/F
ICV	J	J	720	24.1	8.40	8.40	100.7	-	-	P/F	L/F
CCV	J Parnish	6/20/18	1425	23.8	8.45	8.80	100.5	-	-	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	J Parnish	6/20/18	723	180321B	4/19	1000	1000	P/F	L/F
ICV	J	J	724	1470318	9/18	147	146	P/F	L/F
CCV	J Parnish	6/20/18	1428	180321A	4/19	108	101	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.	J Parnish	6/20/18	725	2711081	11/19	7.0	7.00	14.7	P/F	L/F
Calibr.	J	J	726	2711517	10/19	4.0	4.00	155.7	P/F	L/F
Calibr.	J	J	727	2711527	4/19	10.0	9.98	174.9	P/F	L/F
ICV	J	J	735	2711081	11/19	7.0	7.02	14.1	P/F	L/F
CCV	J Parnish	6/20/18	1429	2711517	10/19	4.0	4.06	152.0	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 _____

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	J Parnish	6/20/18	735	0.0	0.0	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 BT 6/25/18 J P 6/22/18

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 11

RQ- 2018-05-14-55

Project: Coit Mon. Spot

- 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-6

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>B = P =</u>	<u>6/20/18</u>	<u>715</u>	<u>23.3</u>	<u>8.53</u>	<u>8.53</u>	<u>100.1</u>	<u>/</u>	<u>/</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>721</u>	<u>23.5</u>	<u>8.49</u>	<u>8.50</u>	<u>100.1</u>	<u>/</u>	<u>/</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>AKalmbacher</u>	<u>6-20-18</u>	<u>1150</u>	<u>24.5</u>	<u>8.34</u>	<u>8.42</u>	<u>101.0</u>	<u>---</u>	<u>1.0454</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>B = P =</u>	<u>6/20/18</u>	<u>723</u>			<u>1000</u>	<u>1000</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>725</u>			<u>100</u>	<u>104</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>AKalmbacher</u>	<u>6-20-18</u>	<u>1155</u>	<u>18032B</u>	<u>4/2019</u>	<u>1,000</u>	<u>994</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 = P =</u>	<u>6/20/18</u>	<u>727</u>			<u>7.0</u>	<u>7.0</u>	<u>-17.2</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.			<u>730</u>			<u>4.0</u>	<u>4.0</u>	<u>157.1</u>	<u>(P) F</u>	<u>(L) F</u>
Calibr.			<u>732</u>			<u>10.0</u>	<u>9.98</u>	<u>-185.2</u>	<u>(P) F</u>	<u>(L) F</u>
ICV			<u>734</u>			<u>7.0</u>	<u>7.03</u>	<u>-17.0</u>	<u>(P) F</u>	<u>(L) F</u>
CCV	<u>AKalmbacher</u>	<u>6-20-18</u>	<u>1200</u>	<u>2711527</u>	<u>4/2019</u>	<u>10.0</u>	<u>10.0</u>	<u>-186.0</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 = P =</u>	<u>6/20/18</u>	<u>735</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:

QC/scanned BT 6/25/18 JP 6/22/18