

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

Boldly "X" this box if there are qualified data on this page.

Meter ID: 650 MDS-Exo^{Em} RQ- 2020-04-20-30 Project: Meirase Lakes

YSI #3

- 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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 2/10/2020

DO DEP SOP FT 1500	Name	Date	Time CT/ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	K. McDonald	6/10/20	0805	26.0	762.3	8.1	7.99 7.99	99.8		1.0311	P F	L F
ICV			0810	26.8	762.3	8.1	8.0 8.0	99.6		1.0311	P F	L F
CCV							7.96				P F	L F
CCV	A. Kalmbacher	6-10-20	1555	26.2	762.3	8.1	8.02	99.4		1.0313	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 (Pro DSS 0.75 to 1.50); 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.	A. Kalmbacher	6/10	0818	191018	10/2020	1000	1000	P F	L F
ICV			0821	190711A	07/20	100	103	P F	L F
CCV	A. Kalmbacher	1600 6-10-20		191018	10/2020	1,000	1,000	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	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	A. Kalmbacher	6/10	0822	2911819	10/21	7.00	26.5	7.00	-45.2	P F	L F
Calibr.			0824	2910629	10/21	4.00	26.5	4.00	138.3	P F	L F
Calibr.			0826	4912323	5/21	10.9.98 10.9.98	26.5	9.96	-214.6	P F	L F
ICV			0828	2910629	10/21	4.00 ^{km}	26.6	3.93	139.9	P F	L F
CCV	A. Kalmbacher	6/10/20	1605	2911819	10/2021	7.0	27.3	7.02	-41.0	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)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 2/10/2020

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	A. Kalmbacher	6/10	0830	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:

DD - old probe

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

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Meter ID:

Stitch

RQ:

2020-04-22-23

Project:

Melrose Lakes

- 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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

2/10/2020

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	K. Appleby	6/10/20	739	25.1	762.3	8.3	8.28	100.3	-	1.03	P/F	L/F
ICV	↓	↓	740	25.1	762.3	8.3	8.28	100.4	-	1.03	P/F	L/F
CCV	J. Parrish	6/10/20	1522	25.1	762.5	8.31	8.3	100.4	-	1.03	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 (Pro DSS 0.75 to 1.50); 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.	K. Appleby	6/10/20	742	200407L	4/2021	1000	1000	P/F	L/F
ICV	↓	↓	743	190711A	7/2020	100	103.8	P/F	L/F
CCV	J. Parrish	6/10/20	1523	200407C	4/21	1000	999	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	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	K. Appleby	6/10/20	747	2911819	10/2021	7.00	26.5	7.00	-38.3	P/F	L/F
Calibr.	↓	↓	748	2910629	10/2021	4.00	25.9	4.00	148.6	P/F	L/F
Calibr.	↓	↓	749	4912823	5/2021	10.00	26.3	10.00	-204.1	P/F	L/F
ICV	↓	↓	751	2911819	10/2021	7.00	26.1	7.00	-32.0	P/F	L/F
CCV	J. Parrish	6/10/20	1526	2910629	10/21	7.00	28.1	7.00	146.2	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)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 2/10/2020

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	K. Appleby	6/10/20	752	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: