

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: P20 P45

RQ: 2018-09-0-21

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 7/18

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.	J Pansh	9/20/18	731	23.2	758.9	8.55	8.55	99.8			P/F	L/F
ICV	J	9/20/18	733	23.2	758.8	8.55	8.53	99.8			P/F	L/F
CCV	J Pansh	9/20/18	1430	23.5	759.3	8.49	8.48	99.8			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.	J Pansh	9/20/18	734	150711A	7/19	1000	1000	P/F	L/F
ICV	J	9/20/18	735	1470715	12/18	147	148	P/F	L/F
CCV	J Pansh	9/20/18	1433	180321A	4/19	100	100	P/F	L/F
CCV	J Pansh	9/20/18	1435	3221413	9/18	1413	1405	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.	J Pansh	9/20/18	739	2803645	3/20	7.00	23.9	7.01		P/F	L/F
Calibr.	J		740	2803038	3/20	4.01	23.9	4.01	154.2	P/F	L/F
Calibr.	J		743	2803038	3/20	10.00	23.9	10.0	192	P/F	L/F
ICV	J		745	2712035	3/20	4.00	23.9	4.00	152.8	P/F	L/F
CCV	J		1439	2712035	3/20	10.00	21.4	10.0	148.8	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 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: _____

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						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:

BP 9/24/18 JP 9/21/18

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

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Meter ID: V5I 6920

RQ: 2018-09-10-21

Project: Melrose Lakes

ROSS LVI

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 _____

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.	C. Ruben	9/20/18	0755	24.1	760	8.40	8.40	100	—	—	(P) F	(L) F
ICV	↓	↓	0757	24.1	760	8.40	8.40	100	—	—	(P) F	(L) F
CCV	POLCOMOR	09-20-18	1600	25.09	760	8.12	8.17	100H	—	—	(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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	C. Ruben	9/20/18	0800	180711A	7/2019	1000	1000	(P) F	(L) F
ICV	↓	↓	0803	180321A	7/2019	100	102	(P) F	(L) F
CCV	↓	↓						P / F	L / F
CCV	POLCOMOR	09-20-18	1605	147071B	12-18	147	152	(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.	C. Ruben	9/20/18	0805	2803E45	3/2020	7.	24.2	7.0	-9.6	(P) F	(L) F
Calibr.	↓	↓	0809	2803D38	3/2020	4.	24.1	4.0	139.7	(P) F	(L) F
Calibr.	↓	↓	0811	2712B55	6/2019	10.	24.3	9.98	-72.2	(P) F	(L) F
ICV	↓	↓	0814	2803E45	3/2020	7.0	24.2	7.03	-18.9	(P) F	(L) F
CCV	POLCOMOR	09-20-18	1610	2803D38	03-2020	4.0	24.56	4.14	131.7	(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)

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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:

GC/Leanned KD 9/24/18 JP 9/21/18