

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: 113529

RQ- 20180430-31

Project: PACE WCE

- 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

1/29/18

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.										P / F	L / F
ICV										P / F	L / F
CCV	MIKE KING	5/8/18	0650	24.36	8.356	8.30	99.1			(P) F	(L) F
CCV	m	5/8/18	1530	27.92	7.842	7.83	99.9			(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.	m	5/8	0655	180124 C	02/2019	10000	10008	(P) F	(L) F
ICV	m	5/8	0656	180124 B	02/2019	1000	1008	(P) F	(L) F
CCV	m	5/8	1535	180329	04/2019	1000	100	(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.	m	5/8	0658	1710655	10/2019	7.0	7.0	8.1	(P) F	(L) F
Calibr.			0659	4712981	11/2019	4.0	4.0	159.7	(P) F	(L) F
Calibr.			0700	2709903	03/2019	10.0	10.0	144.6	(P) F	(L) F
ICV			0705	4712981	11/2019	4.0	4.03		(P) F	(L) F
CCV	m	5/8	1540	1710655	10/2019	7.0	6.97		(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						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:

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: 132237

RQ: 2018-05-07-41

Project: Smp - Dead River

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

4/19/18

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.										P / F	L / F
ICV										P / F	L / F
CCV	J. P. Hays	5/8/18	0728	24.1	8403	8.41	100	—	1.02	Ⓟ / F	(L) F
CCV	J. P. Hays	5/8/18	1530	25.6	8173	8.25	101	—	—	Ⓟ / 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. P. Hays	5/8/18	0730	180124B	2/2019	1000	1000	Ⓟ / F	(L) F
ICV	↓	↓	0732	180124C	2/2019	10,000	9899	Ⓟ / F	(L) F
CCV	J. P. Hays	5/8/18	1532	180329	4/2019	100	97	Ⓟ / 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. P. Hays	5/8/18	0734	1710655	10/2019	7.0	7.0	-34.2	Ⓟ / F	(L) F
Calibr.	↓	↓	0736	4712981	11/2019	4.0	4.0	142.2	Ⓟ / F	(L) F
Calibr.	↓	↓	0738	2709903	3/2019	10.0	10.0	-204.3	Ⓟ / F	(L) F
ICV	↓	↓	0740	2709903	3/2019	10.0	10.0	—	Ⓟ / F	(L) F
CCV	J. P. Hays	5/8/18	1534	4712981	11/2019	4.0	4.1	—	Ⓟ / 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 10 170.1, slope from 4 to 7 176.4 (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 4/19/18

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	J. P. Hays	5/8/17	0742	0.00	0.00	Ⓟ / 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: