

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: 5177 RQ: 2018-03-19-39 Project: Hyale, Lakesides

- 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 1/2018

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.Parrish	3/27/18	724	21.2	8.58	8.58	100	—	—	P/F	L/F
ICV	J	J	726	21.25	8.68	8.66	100	—	—	P/F	L/F
CCV	J	J	1343	22.1	8.72	8.66	99.5	—	—	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	J.Parrish	3/27/18	728	3221413	9/18	1413	1413	P/F	L/F
ICV	J	J	729	1470318	9/18	147	148	P/F	L/F
CCV	J	J	1350	3221413	9/18	1413	1418	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.Parrish	3/27/18	730	2711517	10/19	7.0	7.00	5.6	P/F	L/F
Calibr.	J	J	731	2711681	11/19	4.0	4.00	62.6	P/F	L/F
Calibr.	J	J	732	2708A21	1/19	10.0	10.00	121.2	P/F	L/F
ICV	J	J	733	2711517	10/19	7.0	7.00	5.8	P/F	L/F
CCV	J	J	1351	2708A21	1/19	10.0	10.02	120.4	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.P	3/27/18	734	0.00	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 BD 4/2/18 JP 3/30/18

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:

Meter 3

RQ:

2018-03-26-09

Project:

Gville South

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

Lab

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

1/18

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.	Bruce Davis	3/27	810	21.86	8.75	8.76	100		1.09	P/F	L/F
ICV			811	21.95	8.74	8.71	99.6		1.09	P/F	L/F
CCV	AKalmbacher	3/27	1640	22.6	8.64	8.73	101.0		1.09	P/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.	B = V =	3/27	814	171129B	12/18	1413	1413	P/F	L/F
ICV			815	322413	4/18	100	99	P/F	L/F
CCV	AKalmbacher		1645	322413	4/18	1413	1413	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.	B = V =	3/27	820	2711C81	11/2019	7.0	7.0	-2.6	P/F	L/F
Calibr.			824	2711517	10/2019	4.0	4.0	171.7	P/F	L/F
Calibr.	AKalmbacher		830	2708A21	1/2019	10.0	9.99	-170.9	P/F	L/F
ICV			835	2711C81	11/2019	7.0	7.01	-0.8	P/F	L/F
CCV	AKalmbacher	3/27	1647	2711517	10/2019	4.0	4.13	163.6	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 -170.2 , slope from 4 to 7 -171 (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

1/18

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	AKalmbacher	3-27-18	0840	0.00	0.001	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 4/12/18 JP 3/30/18