

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: H000R

RQ: 2019-12-16-51

Project: Last minute Belmhead

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 10/30/19

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.	Alex Miranda	12/17/19	8:20	23.1	756	8.50	8.52	99.5	N/A	1.04	P F	L F
ICV	Alex Miranda	12/17/19	8:22	23.1	756	8.50	8.53	99.6	N/A	1.04	P F	L F
CCV	Kristene Taylor	12/17/19	17:38	24.6	752	8.30	8.24	99.1	N/A	1.04	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.	Alex Miranda	12/17/19	8:26	2904947	03/21	1000	1000	P F	L F
ICV	Alex Miranda	12/17/19	8:28	2908081	8/21	100	100.9	P F	L F
CCV	Kristene Taylor	12/17/19	17:42	1808891	07/21	5,000	4983	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.	Alex Miranda	12/17/19	8:30	193864	06/21	7.	23.1	7.01	-16.6	P F	L F
Calibr.	"	"	8:32	193247	05/21	4.	23.3	4.00	160.8	P F	L F
Calibr.	"	"	8:34	192995	05/21	10.	23.4	10.02	-195.5	P F	L F
ICV	"	"	8:36	192995	05/21	10.	23.4	10.01	-194.1	P F	L F
CCV	Kristene Taylor	"	17:44	"	"	4	23.4	4.01	161.3	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 10 175.9, slope from 4 to 7 177.4 (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: 10/30/19

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		12/17/19	8:38	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:

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

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Meter ID: Arva RQ- 2019-12-02-60 Project: Tidal Creek Closest

- 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 10/30/19

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.	Kristene T.	12/17/19	8:16	20.6	758	9.0	9.0	99.8	—	1.03	(P) F	(L) F
ICV	"	"	8:18	20.6	758	9.0	8.98	99.9	—	1.03	(P) F	(L) F
CCV	Drew Liddie	12/17/19	1530	23.4	752.5	8.4	8.3	97.0	—	1.05	(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.	Kristene Taylor	12/17/19	8:21	2904947	03/21	1000	1000	(P) F	(L) F
ICV	"	"	8:22	1902934	01/21	100	100	(P) F	(L) F
CCV	Drew Liddie	12/17/19	1532	1907081	07/21	100k	100687	(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.	Kristene Taylor	12/17/19	8:25	192113	04/21	7.	21.0	7.02	-1.7	(P) F	(L) F
Calibr.	"	"	8:27	193247	05/21	4.	20.9	4.00	177.0	(P) F	(L) F
Calibr.	"	"	8:30	191040	03/21	10.	21.1	10.05	-176.0	(P) F	(L) F
ICV	"	"	8:31	"	"	10	20.1	10.05	-175.0	(P) F	(L) F
CCV	Drew Liddie	12/17/19	1534	193804	06/21	4.0	4.0	4.0		(P) F	(L) F
CCV				191303	03/21		22.9	4.1	174.7	(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 10 174.3, slope from 4 to 7 178.7 (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: 10/30/19

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	Kristene Taylor	12/17/19	8:33			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: