

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:

QUANTA #1

RQ-

2017-12-18-10

Project:

LSJR BMAP Tr 165

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 10-10-2017

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.	PO com	12-27-17	0730	21.6	8.81	8.78	100.0	-	-	(P) F	(L) F
ICV	✓	✓	0737	21.6	8.81	8.78	100.0			(P) F	(L) F
CCV	PO com	12-27-17	1405	21.7	8.19	8.66	98.9	-	-	(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.	PO com	12-27-17	0739	171129A	12-2018	1000	1000	(P) F	(L) F
ICV	✓	✓	0740	170151A	03-2018	100	98	(P) F	(L) F
CCV	PO com	12-27-17	1410	17429A	12-2018	1000	1010	(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.	PO com	12-27-17	0742	2708 B60	07-2019	7.0	7.00	-	(P) F	(L) F
Calibr.	✓	✓	0750	2710816	09-2019	4.0	4.00	-	(P) F	(L) F
Calibr. ICV	✓	✓	0753	2706031	12-2018	10.0	9.99	-	(P) F	(L) F
ICV	PO com	12-27-17	1413	2708 B60	07-2019	7.0	7.03	-	(P) F	(L) F
CCV									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 N/A

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 1/3/18

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 name.

Meter ID:

YSI #4

RQ:

2017-12-18-10

Project:

BMAP LSTR

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

10/17

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.	B. Davis	12/27/18	736	21.2	8.88	8.88	100	41.0	0.85	P/F	L/F
ICV			812	21.5	8.89	8.88	100	40.0	0.85	P/F	L/F
CCV			815	21.5	8.82	8.87	100.5	40.0	0.85	P/F	L/F
CCV			1318	21.5	9.51	9.51	102.8	390	0.85	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 #	Explr. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	B. Davis	12/27/18	740	171129A	12/18	1000	1000	P/F	L/F
ICV			745	170315A	3/18	100	104	P/F	L/F
CCV			1321	171129A	12/18	1000	1001	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 #	Explr. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	B. Davis	12/27/18	751	2708B60	7/19	7.0	7.0	-26.9	P/F	L/F
Calibr.			755	2710816	9/19	4.0	4.0	150.8	P/F	L/F
Calibr.			759	2706D31	12/18	10.0	9.98	-199.2	P/F	L/F
ICV			802	2708B60	7/19	7.03	7.03	-26.6	P/F	L/F
CCV						7.0			P/F	L/F
CCV			1324	2710816	9/19	4.0	4.04	147.8	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:

BD 1/3/18