

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

Meter ID: **ARYA**

RQ- **2022-08-08-27**

Project: **TREND/SMP**

Boldly "X" this box if there are qualified data on this page.

- 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 **07/07/2022**

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.	Charlie Hoey	8/8/22	1012	23.2	750	8.5	8.50	99.5	—	1.07	P	L
ICV	"	"	1015	23.2	750	8.5	8.49	99.4	—	1.07	P	L
CCV	Charlie Hoey	8/9/22	1344	25.9	757	8.1	8.20	100.9	—	1.07	P	L
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.	Charlie Hoey	8/8/22	1017	220328A	04/23	1000	1000	P	L
ICV	"	"	1020	220328C	04/23	100	100.3	P	L
CCV	Charlie Hoey	8/9/22	1347	220328B	04/23	5000	4990	P	L
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.	Charlie Hoey	8/8/22	1022	214093	09/23	7.01	23.0	7.01	-10.5	P	L
Calibr.	"	"	1024	217870	01/24	4.00	23.9	4.00	158.9	P	L
Calibr.	"	"	1027	217505	11/23	10.02	23.6	10.02	-197.2	P	L
ICV	"	"	1029	217505	11/23	10.02	23.6	10.02	-196.4	P	L
CCV	Charlie Hoey	8/9/22	1350	214093	09/23	7.01	23.5	7.05	-10.4	P	L
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 **180.7**, slope from 4 to 7 **175.4** (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: **07/07/22**

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	Charlie Hoey	8/8/22	1032	0.00	0.00	P	L

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS: PH Slope from 7 to 10 out of range. PH recalibrated on next page.

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Date of Last Temperature Verification **07/07/2022**

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.											P / F	L / F
ICV											P / F	L / F
CCV											P / F	L / F
CCV											P / F	L / F

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Calibr.								P / F	L / F
ICV								P / F	L / F
CCV								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.	Charlie Hoey	8/8/22	11034	214093	09/23	7.01	23.0	7.01	-12.5	P / F	L / F
Calibr.	"	"	11037	217870	01/24	4.00	23.9	4.00	102.9	P / F	L / F
Calibr.	"	"	11040	217505	11/23	10.02	23.6	10.02	-191.9	P / F	L / F
ICV	"	"	11043	217505	11/23	10.02	23.6	10.02	-191.5	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 **179.4**, slope from 4 to 7 **175.4** (both must be between 165 and 180 mV)

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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: