

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:

YSI # 3

RQ:

2019-02-11-17

Project:

Sumner Canal

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

2/11/19

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.	C. Ruben	2.12.19	0755	21.2	760	8.88	8.88	99.4	—	—	P/F	L/F
ICV	↓	↓	0758	21.3	760	8.86	8.86	100	—	—	P/F	L/F
CCV	↓	↓						99.2			P/F	L/F
CCV	J. Parnell	2/12/19	1515	20.6	760	8.99	8.91	99.2			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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	C. Ruben	2.12.19	0800	181109	11/19	1000	999	P/F	L/F
ICV	↓	↓	0805	1476718	6/19	147	146	P/F	L/F
CCV	↓	↓				100	96	P/F	L/F
CCV	J. Parnell	2/12/19	1518	1807116	7/19	100	96	P/F	L/F

Conductivity Acceptance criteria ± 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.	C. Ruben	2.12.19	0808	2811E61	11/20	7.	22.9	7.04	-20.3	P/F	L/F
Calibr.	↓	↓	0811	2810B32	9/20	4.	23.0	4.14	145	P/F	L/F
Calibr.	↓	↓	0814	2810F55	4/20	10.	23.0	10.01	-189	P/F	L/F
ICV	↓	↓	0816	2811E61	11/20	4.0	23.1	3.81	157	P/F	L/F
CCV										P/F	L/F
CCV	J. Parnell	2/12/19	1520	2810F55	4/20	10.0	23.0	10.04	141.1	P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50;

mV pH 4 Range +180 ± 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)

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: _____

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	C. Ruben	2.12.19	0826	-0.042	0.00	P/F	L/F

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

COMMENTS:

BP QC / Scanned 2/19/19

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: EXO RQ: 2019-02-11-19 Project: LSSR EAST

- 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 02-11-19

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 Connor	02-12-19	0716	22.7	8.62	8.65	100.2	—	—	(P) F	(L) F
ICV	✓	✓	0720	22.7	8.62	8.65	100.3	—	—	(P) F	(L) F
CCV	P. O Connor	02-12-19	1327	23.5	8.49	8.58	100.9	—	—	(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 Connor	02-12-19	0725	181109	11-2019	1000	1000	(P) F	(L) F
ICV	✓	✓	0730	180711B	01-2019	100	103.8	(P) F	(L) F
CCV	PO Connor	02-12-19	1330	1024820	09-2019	24820	25217	(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 Connor	02-12-19	0733	2811E61	11-2020	7.0	7.01	-26.7	(P) F	(L) F
Calibr.	✓	✓	0736	2810B32	09-2020	4.0	4.00	151.3	(P) F	(L) F
Calibr.	✓	✓	0740	2810F55	04-2020	10.0	10.02	199.9	(P) F	(L) F
ICV	✓	✓	0745	2811E61	11-2020	7.0	7.11	31.3	(P) F	(L) F
CCV	PO Connor	02-12-19	1340	2810B32	09-2020	4.0	3.98	152.7	(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:

BP QC/Scanned 2/19/19