

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: Cran Daddy RQ- 2023-06-05-28 Project: LWI TEMP

- 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 4/14/23

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.	Terry Riordan	6/7/23	0726	23.1	755.0	8.5	8.51	99.3	/	0.92	P/F	L/F
ICV			0727	23.1	755.0	8.5	8.51	99.4	/	/	P/F	L/F
CCV	Jessie Atchison		1539	25.5	752.2	8.1	8.38	102.3	/	/	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Terry Riordan	6/7/23	0732	2212B31	12/24	1000	1000	P/F	L/F
ICV			0734	2207G95	07/24	100	101.3	P/F	L/F
CCV	Jessie Atchison		1543	2207G95	7/24	100	101.3	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.	Terry Riordan	6/7/23	0739	223156	06/24	7.01	23.2	7.01	-40.2	P/F	L/F
Calibr.			0742	225424	11/24	4.00	23.3	4.00	137.8	P/F	L/F
Calibr.			0747	222368	10/24	10.02	23.4	10.02	-217.2	P/F	L/F
ICV			0749	222368	10/24	10.02	23.5	10.03	-217.8	P/F	L/F
CCV	Jessie Atchison		1545	225424	11/24	4.00	23.3	4.00	134.5	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 10 177.0, slope from 4 to 7 178.0 (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: 4/14/23

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Knothead; Date of last verification: 5/17/23

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	Terry Riordan	6/7/23	0749	0.272	0.271	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)

Only if this box is checked are qualified data on this page.

Meter ID: Scape Bucket

RQ: 2023-06-1

Project: HAB

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 4/3/23

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.	Terry Riordan	6/7/23	0656	22.6	755.3	8.6	8.60	99.4	/	1.130	P/F	L/F
ICV	1	1	0657	22.7	755.2	8.6	8.61	99.7	/	1	P/F	L/F
CCV	Terry Riordan	1	1525	22.5	752.8	8.6	9.34	108.1	/	1	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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Terry Riordan	6/7/23	0700	2212B31	12/24	1000	1000	P/F	L/F
ICV	1	1	0702	2207G95	07/24	100	101.1	P/F	L/F
CCV	Terry Riordan	1	1508	2207G95	07/24	100	101.2	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.	Terry Riordan	6/7/23	0706	223156	06/24	7.01	23.3	7.01	-39.2	P/F	L/F
Calibr.	1	1	0709	225424	11/24	4.00	23.4	4.00	136.2	P/F	L/F
Calibr.	1	1	0714	222368	10/24	10.01	23.5	10.01	-212.6	P/F	L/F
ICV	1	1	0716	222368	10/24	10.01	23.5	9.99	-211.3	P/F	L/F
CCV	Terry Riordan	1	1520	225424	11/24					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 10 174.4, slope from 4 to 7 174.4 (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: 4/3/23

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: Crusty Date of last verification: 5/17/23

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	Terry Riordan	6/7/23	0716	0.272	0.274	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:

New HAB: Fox Lake x2 DO CCV failed.
* - pH probe wouldn't settle, reading out of range, CCV failed

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

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Meter ID: Shrimp Trap

RQ: 2023

Project:

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 4/14/23

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.	Denver Bourassa	5/7/23	0725	23.4	755.0	8.5	8.46	99.3	/	1.0089	P/F	L/F
ICV	Terry Riordan	1	0731	23.4	755.2	8.5	8.46	99.3	/	/	P/F	L/F
CCV	Denver Bourassa	1	1439	23.2	753.1	8.5	8.50	99.7	/	/	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 mos/cm	Meter Reading μ mos/cm	Pass / Fail	Lab / Field
Calibr.	Denver Bourassa	5/7/23	0733	2212831	DB	1000	1000	P/F	L/F
ICV	Terry Riordan	1	0738	2207695	07/2024	100	101.0	P/F	L/F
CCV	Denver Bourassa	1	1441	2212062	12/2024	5000	10,007	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.	Denver Bourassa	5/7/23	0742	223156	06/2024	7.01	22.1	7.01	-52.1	P/F	L/F
Calibr.	Terry Riordan	1	0749	225424	11/2024	4.00	23.5	4.00	130.4	P/F	L/F
Calibr.		1	0754	222368	10/24	10.02	23.6	10.02	-220.6	P/F	L/F
ICV		1	0757	222368	10/24	10.02	23.5	9.95	-220.2	P/F	L/F
CCV		1	1518	225424	11/2024	4.00	23.4	3.98	130.4	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 10 170.5, slope from 4 to 7 182.5 (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: 4/14/23

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: light; Date of last verification: 5/17/23

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	Denver Bourassa	5/7/23	0808	0.272	0.274	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: 7pH outside of mV spec.