

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:

Hodor

RQ:

2021-01-11-50

Project:

SNP

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 10/28/20

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.	Andrew Luering	1/21/21	8:07	18.1	759.9	9.4	9.43	100	-	1.06	P/F	L/F
ICV	"	"	8:11	18.2	759.9	9.4	9.42	100	-	1.06	P/F	L/F
CCV	"	"	14:10	21.1	756.7	8.9	8.91	100.3	-	1.06	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.	Andrew Luering	1/21/22	8:12	1007D02	07/26/22	1000	997	P/F	L/F
ICV	"	"	8:16	2006988	05/20/22	100	100	P/F	L/F
CCV	"	"	14:18	2007D73	07/20/22	10,000	9,772	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.	Andrew Luering	1/21/2021	8:20	202114	05/20/22	7.0	19.5	-7.08	-14.5	P/F	L/F
Calibr.	"	"	8:24	200052	02/20/22	4.0	19.5	4.04	162.8	P/F	L/F
Calibr.	"	"	8:26	196994	11/20/21	10.0	19.0	10.13	-192.6	P/F	L/F
ICV	"	"	8:29	196994	11/20/21	10.0	19.0	10.0	-194.1	P/F	L/F
CCV	"	"	14:21	200052	02/20/22	4.0	20.6	4.15	155.6	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 10 178.1, slope from 4 to 7 -177.3 (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: 10/28/20

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	Andrew Luering	1/21/2021	8:32	0.00	6.00	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)

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

Meter ID: Hedder

RQ: 2021-01-18-47

Project: SMP

- 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 10/28/20

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.	Andrew Luerding	01/27/21	8:30	22.3	757.8	8.7	8.65	99.7	-	1.06	Ⓟ / F	Ⓟ / F
ICV	"	"	8:32	22.4	757.7	8.7	8.65	99.8	-	1.06	Ⓟ / F	Ⓟ / F
CCV	"	"	1340	23.1	756.1	8.5	8.51	99.9	-	1.06	Ⓟ / F	Ⓟ / 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.	Andrew Luerding	01/27/21	8:37	1007002	07/2022	1000	999	Ⓟ / F	Ⓟ / F
ICV	"	"	8:40	2006488	05/2022	100	108	P / Ⓟ	Ⓟ / F
sev ICV	"	"	8:50	2007676	07/2022	100	99.5	Ⓟ / F	Ⓟ / F
CCV	"	"	1344	1907081	07/21	100,000	100920	Ⓟ / F	Ⓟ / 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.	Andrew Luerding	01/27/21	8:54	202114	05/2022	7.0	23.1	7.01	-14.6	Ⓟ / F	Ⓟ / F
Calibr.	"	"	8:56	200052	02/2022	4.0	23.1	4.08	161.4	Ⓟ / F	Ⓟ / F
Calibr.	"	"	9:02	201473	05/2022	10.0	22.8	9.98	-192.3	Ⓟ / F	Ⓟ / F
ICV	"	"	9:04	201473	05/2022	10.0	22.8	10.0	-190.8	Ⓟ / F	Ⓟ / F
CCV	"	"	1348	200052	02/2022	4.0	22.5	4.08	162.7	Ⓟ / F	Ⓟ / F
CCV	"	"	"	"	"	"	"	3.97	"	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 -177.7, slope from 4 to 7 -176 (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: 10/28/20

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	Andrew Luerding	01/27/21	9:07	0.00	0.00	Ⓟ / F	Ⓟ / 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 100 μ mhos/cm standard on second ICV

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: Hodor

RQ: 2021-01-25-47

Project: SMP

- 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 10/28/20

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.	Andrew Lucier	01/28/21	9:41	22.1	760.6	8.7	8.73	100.5	-	1.05	⓪/F	⓪/F
ICV	"	"	9:44	22.2	760.5	8.7	8.73	100.2	-	1.05	⓪/F	⓪/F
CCV	"	"	1400	20.5	760.8	9.0	8.95	99.4		1.05	⓪/F	⓪/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.	Andrew Lucier	01/28/21	9:47	1007002	07/2022	1000	1008	⓪/F	⓪/F
ICV	"	"	9:50	2007676	07/2022	100	104.2	⓪/F	⓪/F
CCV	"	"	1402	2007173	07/22	10,000	9736	⓪/F	⓪/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.	Andrew Lucier	01/28/21	9:52	202114	05/2022	7.0	22.5	7.01	-14.7	⓪/F	⓪/F
Calibr.	"	"	9:54	200852	02/2022	4.0	22.5	4.08	161.5	⓪/F	⓪/F
Calibr.	"	"	9:55	201473	05/2022	10.0	22.7	9.98	-192.1	⓪/F	⓪/F
ICV	"	"	9:56	201473	05/2022	10.0	22.8	10.0	-191.8	⓪/F	⓪/F
CCV	"	"	1404	200052	02/2022	4.0	20.5	3.99	162.5	⓪/F	⓪/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 10 177.6, slope from 4 to 7 176.2 (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: 10/28/20

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	Andrew Lucier	01/28/21	9:57	0.00	0.60	⓪/F	⓪/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: Hedler

RQ: 2021-02-15-23

Project: SMP 4 CM

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 01/27/2021

DO FDEP SOP FT 1500	Name	Date	Time GT-ET	Temp °C	Baro- meter mmHg	DO Chart mg/L	Meter DO mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Drew Lid 214	02/22/21	0740	22.4	757	8.6	8.61	99.6	—	1.06	(P) F	(L) F
ICV	11	11	0742	22.4	757	8.6	8.63	99.7	—	1.06	(P) F	(L) F
CCV	11	16/14	0744	22.3	757	8.7	8.63	99.3	—	1.06	(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 200	Name	Date	Time GT-ET	Lot#	Expir. Date	Standard umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew Lid 214	02/22/21	0744	1102199	01/23	1000	1000	(P) F	(L) F
ICV	11	11	0746	2008616	07/22	100	100.3	(P) F	(L) F
CCV	11	11	16/16	2009A62	08/22	50K	49785	(P) F	(L) F
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP FT 1100	Name	Date	Time GT-ET	Lot#	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew Lid 214	02/22/21	0748	202114	05/22	7.0	22.6	7.01	157.6	(P) F	(L) F
Calibr.	11	11	0750	2014891	10/22	4.0	22.8	4.01	157.6	(P) F	(L) F
Calibr.	11	11	0752	2014723	05/22	10.0	22.7	10.01	198.2	(P) F	(L) F
ICV	11	11	0754	201473	05/22	10.0	22.8	10.03	198.2	(P) F	(L) F
CCV	11	11	16/18	2011891	10/22	4.0	23.1	4.03	163.2	(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)

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: 01/27/2021

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Drew Lid 214	02/22/21	0756	0.00	0.00	(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)

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

Meter ID: Hodor

RQ: 2021-02-08-45

Project: SMP

- 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 01/27/21

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.	Andrew Luering	2/25/21	9:00	22.4	76.0	8.7	8.67	99.8	-	1.07	⓪/F	⓪/F
ICV	"	"	9:03	22.5	76.0	8.7	8.67	100.2	-	1.07	⓪/F	⓪/F
CCV	"	"	14:51	24.4	75.9	8.3	8.39	100.3	-	1.07	⓪/F	⓪/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.	Andrew Luering	2/25/21	9:06	1102199	01/2023	1000	1000	⓪/F	⓪/F
ICV	Andrew Luering	2/25/21	9:10	2007676	07/2022	1010	100.3	⓪/F	⓪/F
CCV	"	"	14:54	2009462	08/2022	50,000	49,892	⓪/F	⓪/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.	Andrew Luering	2/25/21	9:12	202114	05/2022	7.0	22.8	7.05	-134	⓪/F	⓪/F
Calibr.	Andrew Luering	2/25/21	9:15	201891	10/2022	4.0	23.0	4.05	163.1	⓪/F	⓪/F
Calibr.	Andrew Luering	2/25/21	9:25	201473	05/2022	10.0	22.9	10.01	-187.2	⓪/F	⓪/F
ICV	Andrew Luering	2/25/21	9:26	201473	05/2022	10.0	22.9	9.98	-186.4	⓪/F	⓪/F
CCV	"	"	14:56	201891	10/2021	7.0	23.0	4.03	163.2	⓪/F	⓪/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 -173.8, slope from 4 to 7 -176.5 (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: 01/27/21

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	Andrew Luering	2/25/21	9:30	0.00	0.00	⓪/F	⓪/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)

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

Meter ID: Hedon

RQ:

Project: SMP

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 01/27/21

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.	Drew Liddick	03/04	0815	20.6	756	8.9	8.91	99.6	—	1.06	P/F	L/F
ICV			0818	20.8	756	8.9	8.91	99.6	—	1.06	P/F	L/F
CCV			1345	23.1	756	8.5	8.50	99.6	—	1.06	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.	Drew Liddick	03/04	0820	1102199	01/23	1000	1000	P/F	L/F
ICV			0823	2007676	07/22	100	100	P/F	L/F
CCV			1350	1102199	01/23	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 #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	03/04	0825	2101807	12/22	7.0	23.1	7.01	-13.6	P/F	L/F
Calibr.			0828	2011891	10/22	4.0	23.1	4.01	165.2	P/F	L/F
Calibr.			0831	201473	05/22	10.0	23.0	10.01	-187.4	P/F	L/F
ICV			0834	201473	05/22	10.0	23.0	10.01	-187.1	P/F	L/F
CCV			1354	2011891	10/22	4.0	22.9	4.06	160.9	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)

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: 01/27/21

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	Drew Liddick	03/04	0838	0.00	0.00	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:

2021-03-01-62
2021-03-01-63

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: Hador

RQ: 2021-02-22-07

Project: SMP

- 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 01/27/21

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.	Andrew Luerig	03/08/21	9:22	20.3	766	8.8	9.10	100.8	-	1.07	P / F	L / F
ICV	"	"	9:25	20.5	766	9.1	9.10	101.2	-	1.07	P / F	L / F
CCV	"	"	15:28	20.2	765	9.1	9.17	101.3	-	1.07	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.	Andrew Luerig	03/08/21	9:28	1102199	01/2023	1,000	1,000	P / F	L / F
ICV	"	"	9:30	2007676	07/2022	100	99.5	P / F	L / F
CCV	"	"	15:30	2609A62	08/2022	50,000	50,170	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.	Andrew Luerig	03/08/21	9:33	202114	05/2022	7.0	20.6	7.12	-17.9	P / F	L / F
Calibr.	"	"	9:35	2011891	10/2022	4.0	21.3	4.05	160.8	P / F	L / F
Calibr.	"	"	9:37	201473	05/2022	10.0	21.3	10.06	-189.3	P / F	L / F
ICV	"	"	9:38	201473	05/2022	10.0	21.3	9.98	-188.8	P / F	L / F
CCV	"	"	15:32	2011891	10/2022	4.0	21.5	3.96	162.6	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 -171.4, slope from 4 to 7 -188.7 (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: 01/27/21

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	Andrew Luerig	03/08/21	9:42	0.60	0.00	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)

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

Meter ID: Hodor

RQ- 2021-03-02-32

Project: SMP

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 01/27/21

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.	<u>Drew L22124</u>	<u>03/09</u>	<u>0930</u>	<u>21.5</u>	<u>767</u>	<u>8.9</u>	<u>8.92</u>	<u>100.0</u>	<u>-</u>	<u>1.06</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>"</u>	<u>"</u>	<u>0932</u>	<u>21.5</u>	<u>767</u>	<u>8.9</u>	<u>8.92</u>	<u>100.0</u>	<u>-</u>	<u>1.06</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>"</u>	<u>"</u>	<u>1410</u>	<u>22.0</u>	<u>767</u>	<u>8.8</u>	<u>8.88</u>	<u>100.0</u>	<u>-</u>	<u>1.06</u>	<u>P/F</u>	<u>L/F</u>
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.	<u>Drew L22124</u>	<u>03/09</u>	<u>0934</u>	<u>1102199</u>	<u>01/23</u>	<u>1500</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>"</u>	<u>"</u>	<u>0936</u>	<u>2007676</u>	<u>07/22</u>	<u>150</u>	<u>99.6</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>"</u>	<u>"</u>	<u>1414</u>	<u>2009A62</u>	<u>08/22</u>	<u>50,000</u>	<u>49692</u>	<u>P/F</u>	<u>L/F</u>
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.	<u>Drew L22124</u>	<u>03/09</u>	<u>0938</u>	<u>201807</u>	<u>12/22</u>	<u>7.0</u>	<u>21.8</u>	<u>7.00</u>	<u>-15.3</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>"</u>	<u>"</u>	<u>0942</u>	<u>201891</u>	<u>10/22</u>	<u>4.0</u>	<u>21.8</u>	<u>4.00</u>	<u>164.9</u>	<u>P/F</u>	<u>L/F</u>
Calibr.	<u>"</u>	<u>"</u>	<u>0944</u>	<u>201473</u>	<u>05/22</u>	<u>10.0</u>	<u>21.9</u>	<u>10.01</u>	<u>-18.5</u>	<u>P/F</u>	<u>L/F</u>
ICV	<u>"</u>	<u>"</u>	<u>0948</u>	<u>201473</u>	<u>05/22</u>	<u>10.0</u>	<u>21.9</u>	<u>10.01</u>	<u>-18.1</u>	<u>P/F</u>	<u>L/F</u>
CCV	<u>"</u>	<u>"</u>	<u>1416</u>	<u>2011891</u>	<u>10/22</u>	<u>4.0</u>	<u>22.0</u>	<u>4.02</u>	<u>163.1</u>	<u>P/F</u>	<u>L/F</u>
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)

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: 01/27/21

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	<u>Drew L22124</u>	<u>03/09</u>				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)

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

Meter ID:

Hador

RQ-

2021-03-08-33

Project:

SMP

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 01/27/21

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.	Andrew Luering	3/10/21	8:13	20.5	766	9.1	9.04	100.7	-	106	P/F	L/F
ICV	"	"	8:15	20.8	766	9.0	9.03	100.9	-	1.06	P/F	L/F
CCV	Sabrina Fischer	"	1340	21.3	765	8.9	8.83	99.8	-	1.06	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.	Andrew Luering	3/10/21	8:19	1102199	01/2023	1000	987	P/F	L/F
ICV	"	"	8:22	2007676	07/2022	160	102.7	P/F	L/F
CCV	Sabrina Fischer	"	1342	2009A62	08/22	50,000	50371	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.	Andrew Luering	3/10/21	8:25	202114	05/2022	7.0	21.6	7.08	-16.7	P/F	L/F
Calibr.	"	"	8:27	2011891	10/2022	4.0	22.1	4.01	163.4	P/F	L/F
Calibr.	"	"	8:31	201473	05/2022	10.0	22.1	10.03	-189.8	P/F	L/F
ICV	"	"	8:32	201473	05/2022	10.0	22.1	10.0	-189.4	P/F	L/F
CCV	Sabrina Fischer	"	1344	2011891	10/22	4.0	22.3	3.99	163.1	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 -173.1 , slope from 4 to 7 180.1 (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: 01/27/21

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	Andrew Luering	3/10/21	8:35	0.00	0.00	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)

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

Meter ID: Hodor

RQ- 2021-03-15-45

Project: SMP

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 01/27/21

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.	Andrew Luering	03/15/21	8:53	21.8	759	8.8	8.76	99.3	-	1.07	P/F	L/F
ICV	"	"	8:55	21.9	759	8.7	8.75	100.0	-	1.07	P/F	L/F
CCV	"	"	15:24	23.6	758	8.5	8.49	100.1	-	1.07	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.	Andrew Luering	3/15/21	8:58	1102199	01/2023	1000	1004	P/F	L/F
ICV	"	"	9:00	2007676	07/2022	100	99.8	P/F	L/F
CCV	"	"	15:34	2009A62	08/2022	50,000	50,122	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.	Andrew Luering	3/15/21	9:04	2101307	12/2022	7.0	22.8	7.04	-15.6	P/F	L/F
Calibr.	"	"	9:06	2011891	10/2022	4.0	22.7	3.96	165.2	P/F	L/F
Calibr.	"	"	9:09	201473	05/2022	10.0	22.7	10.00	-192.7	P/F	L/F
ICV	"	"	9:11	201473	05/2022	10.0	22.7	9.97	-191.2	P/F	L/F
CCV	"	"	15:36	2011891	16/2022	4.0	22.7	4.65	162.1	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 -177.1, slope from 4 to 7 -180.8 (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: 01/27/21

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	Andrew Luering	03/15/21	9:13	0.00	0.00	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)

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

Meter ID: Hodork

RQ: 2021-03-15-37

Project: SMP

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

01/27/21

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.	Sabrina Fischer	03/16/21	0815	19.8	759	9.1	9.08	99.8	—	1.07	P/F	L/F
ICV	"	"	0817	20.0	759	9.1	9.09	100	—	1.07	P/F	L/F
CCV	"	"	1620	24.4	756	8.3	8.33	99.7	—	1.07	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.	Sabrina Fischer	03/16/21	0819	1102199	01/23	1000	1000	P/F	L/F
ICV	"	"	0821	2007674	07/22	100	98.9	P/F	L/F
CCV	"	"	1622	2009A62	08/22	50000	50422	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.	Sabrina Fischer	03/16/21	0823	2101B07	12/22	7.	22.4	7.01	-12.6	P/F	L/F
Calibr.	"	"	0825	2011891	10/22	4.	22.4	4.00	165.6	P/F	L/F
Calibr.	"	"	0827	201473	05/22	10.	22.5	10.03	-187.8	P/F	L/F
ICV	"	"	0829	201473	05/22	10.	22.5	10.02	-187.8	P/F	L/F
CCV	"	"	1624	2011891	10/22	4.	22.7	4.05	162.6	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 10 175.2, slope from 4 to 7 178.2 (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: 01/27/21

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	Sabrina Fischer	03/16/21	0831	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)

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

Meter ID: Hodol

RQ: 2021-03-15-65

Project: SMP

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 01/27/21

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.	Sabrina Fischer	03/17/21	0815	22.0	758	8.7	8.73	99.8	—	1.07	P/F	L/F
ICV	"	"	0817	22.1	758	8.7	8.71	99.8	—	1.07	P/F	L/F
CCV	"	"	1400	25.6	757	8.1	8.22	100.5	—	1.07	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.	Sabrina Fischer	01/27/21	0819	1102199	01/23	1000	1004	P/F	L/F
ICV	"	"	0821	2007676	07/22	100	99.8	P/F	L/F
CCV	"	"	1402	1102199	01/23	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 #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Sabrina Fischer	03/17/21	0823	2011801	12/22	7.	22.9	7.01	-12.5	P/F	L/F
Calibr.	"	"	0825	2011891	10/22	4.	22.9	4.00	166.1	P/F	L/F
Calibr.	"	"	0827	201473	05/22	10.	22.9	10.02	-188.4	P/F	L/F
ICV	"	"	0829	201473	05/22	10.	22.9	10.02	-188.2	P/F	L/F
CCV	"	"	1404	2011891	10/22	4.	22.9	4.03	164.7	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 10 175.9, slope from 4 to 7 178.6 (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: 01/27/21

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	Sabrina Fischer	03/17/21	0831	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)

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

Meter ID: H000R

RQ: 2021-03-22-15

Project: SMP

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 01/27/21

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.	Sabrina Fischer	03/22/21	0800	19.3	756	9.2	9.14	99.4	—	1.08	P / F	L / F
ICV	"	"	0802	19.5	756	9.1	9.15	99.6	—	1.08	P / F	L / F
CCV	"	"	1200	22.8	756	8.6	8.67	100.6	—	1.08	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.	Sabrina Fischer	3/22/21	0804	1102199	01/23	1000	1002	P / F	L / F
ICV	"	"	0806	2007674	07/22	100	98.8	P / F	L / F
CCV	"	"	1202	2009162	08/22	50,000	50362	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.	Sabrina Fischer	3/22/21	0808	2101807	12/22	7.	22.3	7.01	-12.4	P / F	L / F
Calibr.	"	"	0810	2011891	10/22	4.	22.4	4.00	165.5	P / F	L / F
Calibr.	"	"	0812	204173	05/22	10.	22.4	10.03	-187.6	P / F	L / F
ICV	"	"	0814	201473	05/22	10.	22.4	10.02	-187.8	P / F	L / F
CCV	"	"	1204	2011891	10/22	4.	22.4	4.05	162.3	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 10 175.2, slope from 4 to 7 176.9 (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: 01/27/21

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	Sabrina Fischer	3/22/21	0814	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)

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

Meter ID: H200

RQ: 2021-03-22-19

Project: SMP

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 01/27/21

DO DEP SOP FT 1500	Name	Date	Time ET-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.	Drew Liddick	03/23/21	0900	21.4	757	8.8	8.8	99.7	—	1.07	P/F	L/F
ICV	"	03/23	0904	21.4	757	8.8	8.8	99.7	—	1.07	P/F	L/F
CCV											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.	Drew Liddick	03/23/21	0906	1102199	01/23	1000	1000	P/F	L/F
ICV	"	03/23/21	0908	1102199	07/22	100	100	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.	Drew Liddick	03/23/21	0910	201807	12/20	7.0	22.4	7.0	-24.3	P/F	L/F
Calibr.	"	03/23/21	0912	201891	10/22	4.0	22.4	4.0	162.2	P/F	L/F
Calibr.	"	03/23/21	0914	201473	05/22	10.0	22.4	10.0	-191.3	P/F	L/F
ICV	"	03/23/21	0916	201473	05/22	10.0	22.4	10.0	-191.7	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)

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: 01/27/21

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	Drew Liddick	03/23/21	0918	0.00	0.00	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)

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

Meter ID:

Hodor

RQ:

Project:

Status and Trend

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

01/27/21

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.	Andrew Luering	03/31/21	7:56	22.8	759	8.6	8.57	99.9	-	1.07	P/F	L/F
ICV	"	"	7:59	23.0	759	8.6	8.56	99.9	-	1.07	P/F	L/F
CCV	"	"	1304	23.6	759	8.5	8.44	99.4	-	1.07	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.	Andrew Luering	03/31/21	8:02	110219	01/20/23	1000	1001	P/F	L/F
ICV	"	"	8:06	2007676	07/20/22	100	99.6	P/F	L/F
CCV	"	"	1313	2009A62	08/20/22	50,000	49,884	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.	Andrew Luering	03/31/21	8:09	2101B07	12/20/22	7.0	23.3	7.03	-17.3	P/F	L/F
Calibr.	"	"	8:12	2011891	10/20/22	4.0	23.3	3.99	161.4	P/F	L/F
Calibr.	"	"	8:15	201473	05/20/22	10.0	23.3	10.04	-193.7	P/F	L/F
ICV	"	"	8:16	201473	05/20/22	10.0	23.3	9.99	-193.3	P/F	L/F
CCV	"	"	1315	2011891	10/20/22	4.0	22.9	4.0	161.1	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 -176.4 , 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:

01/27/21

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	Andrew Luering	03/31/21	8:20	0.00	0.00	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)

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

Meter ID: Hodor RQ- 2021-04-1253 Project: SMP

- 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 1/27/21

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.	Andrew Lueking	04/22/21	9:59	22.7	757	8.6	8.60	99.1	-	1.08	P/F	P/F
ICV	"	"	10:01	22.8	757	8.6	8.59	99.7	-	1.08	P/F	P/F
CCV	S. Fischer	"	1545	22.7	757	8.6	8.62	99.9	✓	1.08	P/F	P/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. ET 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Lueking	4/22/21	10:03	1102199	01/2023	1000	1001	P/F	P/F
ICV	"	"	10:05	2007676	07/2022	100	98.3	P/F	P/F
CCV	S. Fischer	"	1547	2009A42	08/22	50,000	50205	P/F	P/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP ET 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Lueking	4/22/21	10:07	2101307	12/2022	7.0	23.2	7.02	-18.4	P/F	P/F
Calibr.	"	"	10:09	2011891	10/2022	4.0	23.2	4.04	159.9	P/F	P/F
Calibr.	"	"	10:13	201473	05/2022	10.0	23.2	9.92	-141.7	P/F	P/F
ICV	"	"	10:15	201473	05/2022	10.0	23.2	9.98	-141.6	P/F	P/F
CCV	S. Fischer	"	1549	2011891	10/22	4.	23.1	400.0	161.2	P/F	P/F
CCV								23.97		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 10 173.3, slope from 4 to 7 178.3 (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: 1/27/21

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	Andrew Lueking	4/22/21	10:16	0.00	0.00	P/F	P/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)

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

Meter ID:

Hodor

RQ:

2021-03-22-70

Project:

SMP/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

1/27/21

DO FDEP 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.	Andrew Luering	4/26/21	1014	23.2	756	8.5	8.50	79.8	-	1.07	P/F	L/F
ICV	"	"	1615	23.3	756	8.5	8.49	99.5	-	1.07	P/F	L/F
CCV	S. Fischer	"	1740	25.5	757	8.2	8.14	99.2	-	1.07	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	4/26/21	1018	1102199	01/2023	1000	1001	P/F	L/F
ICV	"	"	1020	2007676	07/2022	100	100.6	P/F	L/F
CCV	S. Fischer	"	1742	2009A62	09/22	50000	50234	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP FT 1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	4/27/21	1023	2101807	12/2022	7.0	23.5	7.03	-18.4	P/F	L/F
Calibr.	"	"	1025	2011891	10/2022	4.0	23.5	3.95	162.2	P/F	L/F
Calibr.	"	"	1028	201473	05/2022	10.0	23.5	10.02	-193.4	P/F	L/F
ICV	"	"	1029	201473	05/2022	10.0	23.5	9.97	-192.2	P/F	L/F
CCV	S. Fischer	"	1744	2011891	10/22	4.	23.2	4.05	158.7	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 10 175, slope from 4 to 7 180.6 (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: 1/27/21

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	Andrew Luering	4/27/21	1030	0.00	0.00	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)

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

Meter ID: Hedot RQ: 2021-03-29-67 Project: SMP

- 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 04/26/2021

DO DEP SOP ET 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.	Andrew Luering	4/29/21	9:10	23.0	757	8.5	8.53	99.6	—	1.08	Ⓟ/F	Ⓟ/F
ICV	"	"	9:11	23.1	757	8.5	8.54	99.7	—	1.08	Ⓟ/F	Ⓟ/F
CCV	S. Fischer	"	1415	24.0	754	8.1	8.11	100.0	—	1.08	Ⓟ/F	Ⓟ/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. ET 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	4/29/21	9:15	1102199	01/2023	1000	1000	Ⓟ/F	Ⓟ/F
ICV	"	"	9:17	2007674	07/2023	100	97.3	Ⓟ/F	Ⓟ/F
CCV	S. Fischer	"	1417	200-1A62	08/22	50,000	50222	Ⓟ/F	Ⓟ/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP ET 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	4/29/21	9:19	261307	12/2022	7.0	23.4	7.02	-17.5	Ⓟ/F	Ⓟ/F
Calibr.	"	"	9:25	2611891	10/2022	4.0	23.4	4.02	160.5	Ⓟ/F	Ⓟ/F
Calibr.	"	"	9:28	261473	05/2022	10.0	23.5	10.14	-200.3	Ⓟ/F	Ⓟ/F
ICV	"	"	9:29	201473	05/2022	10.0	23.5	9.99	-198.4	Ⓟ/F	Ⓟ/F
CCV	S. Fischer	"	1419	2011891	10/22	4.	23.5	3.95	159.8	Ⓟ/F	Ⓟ/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 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: 04/26/2021

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	Andrew Luering	4/29/21	9:30	0.00	6.00	Ⓟ/F	Ⓟ/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)

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

Meter ID: Hoder

RQ: 2021-05-03-66

Project: SMP

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 04/26/2021

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.	Andrew Luering	5/10/21	8:15	23.3	758	8.5	8.50	99.0%	-	1.08	⓪/F	⓪/F
ICV	"	"	8:17	23.4	758	8.5	8.50	99.9%	-	1.08	⓪/F	⓪/F
CCV	S. Fischer	"	1245	24.7	757	8.3	8.35	100.6	-	1.08	⓪/F	⓪/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.	Andrew Luering	5/10/21	8:20	1102199	01/2023	1000	1002	⓪/F	⓪/F
ICV	"	"	8:22	102792	01/2023	100	97.8	⓪/F	⓪/F
CCV	S. Fischer	"	1247	2009462	08/22	50000	50148	⓪/F	⓪/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP ET 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	5/10/21	8:24	2101307	12/2022	7.0	23.6	7.05	-24.1	⓪/F	⓪/F
Calibr.	"	"	8:27	2011891	10/2022	4.0	23.5	3.93	160.8	⓪/F	⓪/F
Calibr.	"	"	8:29	201473	05/2022	10.0	23.6	9.90	-193.0	⓪/F	⓪/F
ICV	"	"	8:30	201473	05/2022	10.0	23.6	9.95	-192.7	⓪/F	⓪/F
CCV	S. Fischer	"	1249	2011891	10/22	4.	23.4	3.94	162.3	⓪/F	⓪/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 10 217.1, slope from 4 to 7 184.9 (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: 04/26/2021

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	Andrew Luering	5/10/21	8:31	0.00	0.00	⓪/F	⓪/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)

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

Meter ID:

H060

RQ:

05-10-55

Project:

SMP

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 04/26/2021

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.	Andrew Laering	5/20/21	8:17	23.2	760	8.5	8.55	100.2	-	1.08	P/F	P/F
ICV	"	"	8:19	23.3	760	8.5	8.54	100.2	-	1.08	P/F	P/F
CCV	S. Fischer	"	14:17	25.4	761	8.2	8.19	99.8	/	1.08	P/F	P/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.	Andrew Laering	5/20/21	8:21	1102199	01/2023	1000	1006	P/F	P/F
ICV	"	"	8:24	1102792	01/2023	100	98.3	P/F	P/F
CCV	S. Fischer	"	14:19	1102199	01/23	1000	994	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.	Andrew Laering	5/20/21	8:26	2101 B07	12/2022	7.0	23.5	6.98	-17.2	P/F	P/F
Calibr.	"	"	8:29	2011891	10/2022	4.0	23.4	3.98	159.7	P/F	P/F
Calibr.	"	"	8:30	2012064	06/2022	10.0	23.4	9.87	-182.8	P/F	P/F
ICV	"	"	8:32	2012064	06/2022	10.0	23.4	9.99	-183.5	P/F	P/F
CCV	S. Fischer	"	14:21	2011891	10/22	4.0	22.9	3.97	160.6	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)

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: 04/26/21

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	Andrew Laering	5/20/21	8:34	0.00	0.00	P/F	P/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)

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

Meter ID: H401

RQ:

Project: 3.4P

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 04/26/2021

DO FDEP SOP ET 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.	D. Liddick	05/27	0930	23.4	759	8.5	8.52	100	✓		P / F	L / F
ICV				23.4	759	8.5	8.52	100			P / F	L / F
CCV											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. ET 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	D. Liddick			1102799	01/23	1000	1000	P / F	L / F
ICV				1102792	01/23	1000	1000	P / F	L / F
CCV								P / F	L / F
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP ET 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	D. Liddick	05/27				7.0	23.4	7.01	-16.9	P / F	L / F
Calibr.						4.0	23.3	3.92	162.7	P / F	L / F
Calibr.						10.0	23.5	9.99	-187.9	P / F	L / F
ICV						10.0	23.5	10.00	-188.0	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 -171, slope from 4 to 7 179.6 (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: 04/26/2021

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	D. Liddick	05/27		0.00	0.00	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)

Start Boat Monthly
+ FB

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

Meter ID: H025

RQ: 2021-05-31-42

Project: hmp

- 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 04/26/21

DO FDEP 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.	D. Liddick	06/01/21	1000	23.7	759	8.5	8.5	100.9	—	1.07	P/F	L/F
ICV	↓	↓	1004	23.7	759	8.5	8.5	100.1	—	1.07	P/F	L/F
CCV	J. SKAGGS	06/01/21	1600	23.4	759	8.5	8.5	100.1	—	—	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. ET 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	D. Liddick	06/01/21	1006	162179	01/23	1000	1000	P/F	L/F
ICV	↓	↓	1008	1102792	01/23	100	100	P/F	L/F
CCV	J. SKAGGS	06/01/21	1605	2009A62	08/22	50000	50100	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP ET 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	D. Liddick	06/01/21	1010	261B07	12/20	7.0	23.4	7.0	-21.1	P/F	L/F
Calibr.	↓	↓	1012	4012K91	12/22	4.0	23.4	4.0	158.8	P/F	L/F
Calibr.	↓	↓	1014	2012C64	06/22	10.0	23.4	10.0	-189.1	P/F	L/F
ICV	↓	↓	1016	2012C64	06/22	10.0	23.5	10.1	-188.9	P/F	L/F
CCV	J. SKAGGS	06/01/21	1610	4012K91	12/22	4.0	23.4	4.0	158.5	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 10 168, slope from 4 to 7 179.9 (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: 04/26/21

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	D. Liddick	06/01/21	1018	0.00	0.00	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)

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

Meter ID: Hodor

RQ: 2021-06-14-40

Project: 5MP4 CM

- 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 04/26/21

DO DEP-SOP FD 1500	Name	Date	Time GT-ET	Temp °C	Baro- meter mmHg	DO Chart mg/L	Meter DO mg/L	% DO	Probe Charge	Probe Cell	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	06/22/21	0804	23.2	757	8.5	8.51	99.17	—	1.05	P/F	L/F
ICV	//	//	0806	23.2	757	8.5	8.53	99.17	—	1.05	P/F	L/F
CCV	//	//	1614	24.7	757	8.3	8.42	99.3	—	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. FD 1200	Name	Date	Time GT-ET	Lot#	Expir. Date	Standard umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	06/22/21	0808	1105E62	05/23	1000	1000	P/F	L/F
ICV	//	//	0810	1105A92	01/23	100	100	P/F	L/F
CCV	//	//	1622	2009A62	08/22	50K	49,774	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP-SOP FD 1100	Name	Date	Time GT-ET	Lot#	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	06/22/21	0812	2101B07	12/22	7.0	23.5	7.16	-24.1	P/F	L/F
Calibr.	I	I	0814	4012K91	12/22	4.0	23.5	4.01	155.7	P/F	L/F
Calibr.	I	I	0816	2012C64	06/22	10.0	23.5	10.01	-19.8	P/F	L/F
ICV	//	//	0818	2012C64	06/22	10.0	23.5	10.01	-189.7	P/F	L/F
CCV	//	//	1624	4012K91	12/22	4.0	23.6	4.01	156.2	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 -167.7, slope from 4 to 7 179.8 (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: 04/26/21

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Drew Liddick	06/22/21	0820	0.00	0.00	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)

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

Meter ID: Hodor RQ: 2021-06-14-40 Project: SMPC CM

- 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 04/26/2021

DO DEFSOP FD1500	Name	Date	Time GT-ET	Temp °C	Baro meter mmHg	DO Chart mg/L	Meter DO mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	06/29/21	0730	23.1	758	8.5	8.5	99.7	—	1106	P/F	L/F
ICV	//	//	0734	23.1	758	8.5	8.5	99.7	—	1106	P/F	L/F
CCV	//	//	1650	26.5	758	8.0	8.11	99.4	—	1106	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. Gond. FD1200	Name	Date	Time GT-ET	Lot #	Expir. Date	Standard umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	06/29/21	0736	1105E62	05/23	1000	1000	P/F	L/F
ICV	//	//	0738	1102792	01/23	100	101.1	P/F	L/F
CCV	//	//	1652	2009A62	08/22	50K	49876	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEFSOP FD1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	06/29/21	0740	2101B07	12/22	7.0	23.7	7.01	-20.1	P/F	L/F
Calibr.	I	I	0742	4012K91	12/22	4.0	23.6	4.01	158.7	P/F	L/F
Calibr.	I	I	0744	2012C64	06/22	10.0	23.6	10.01	188.6	P/F	L/F
ICV	I	I	0746	2012C64	06/22	10.0	23.6	10.12	187.3	P/F	L/F
CCV	//	//	1654	4012K91	12/22	4.0	23.6	4.13	151.5	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 -168.5 slope from 4 to 7 178.8 (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: 04/26/2021

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Drew Liddick	06/29/21	0748	0.00	0.00	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)

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

Meter ID: Hado

RQ: 2021-04-19-37

Project: SMP & CM

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 04/26/2021

DO FDEP SOP FT 14500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	DO Chart mg/L	Meter DO mg/L	% DO	Probe Charge	Probe Gain	Pass Fail	Lab Field
Calibr.	Drew Liddick	07/12/21	0800	23.3	757	8.6	8.61	99.7	—	105	P/F	L/F
ICV	//	//	0804	23.3	757	8.6	8.61	99.7	—	105	P/F	L/F
CCV	//	//	1655	25.7	757	8.1	8.13	99.4	—	105	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. EV 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass Fail	Lab Field
Calibr.	Drew Liddick	07/12/21	0806	1105 E62	05/23	1500	1500	P/F	L/F
ICV	//	//	0808	1102 A92	01/23	100	100	P/F	L/F
CCV	//	//	1652	2009 A62	08/23	50K	50111	P/F	L/F
CCV							30111	P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP EV 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass Fail	Lab Field
Calibr.	Drew Liddick	07/12/21	0810	2101 B07	12/22	7.0	23.7	7.01	-22.1	P/F	L/F
Calibr.	I	I	0812	4012 K91	12/22	4.0	23.7	4.01	156.7	P/F	L/F
Calibr.	I	I	0814	2012 C64	06/22	10.0	23.7	10.01	-188.7	P/F	L/F
ICV	I	I	0816	2012 C64	06/22	10.0	23.7	10.12	-190.1	P/F	L/F
CCV	//	//	1654	4012 K91	12/22	4.0	23.4	4.11	154.7	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 -166.6, slope from 4 to 7 178.8 (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: 04/26/2021

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	Drew Liddick	07/12/21	0818	0.00	0.00	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)

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

Meter ID: Hodor

RQ: 2021-07-12-38

Project: SMP

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 04/26/21

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	7/13	8:03	23.3	760.8	8.5	8.5	100.3		1.07	P/F	L/F
ICV	Charlie Hoey	7/13	8:06	23.4	760.7	8.5	8.5	100.2		1.07	P/F	L/F
CCV	Charlie Hoey	7/13	14:22	29.0	760.9	7.7	7.6	99.4		1.07	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.	Charlie Hoey	7/13	8:07	1105E62	5/23	1000	1005	P/F	L/F
ICV	Charlie Hoey	7/13	8:11	1102792	1/23	100	98.5	P/F	L/F
CCV	Charlie Hoey	7/13	14:18	1105C52	5/23	5000	5024	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	7/13	8:14	2101B07	12/22	7.0	23.5	7.16	-24.1	P/F	L/F
Calibr.	Charlie Hoey	7/13	8:17	4012K91	12/22	4.0	23.4	4.07	155.7	P/F	L/F
Calibr.	Charlie Hoey	7/13	8:20	2012C64	6/22	10.0	23.5	10.05	-192.0	P/F	L/F
ICV	Charlie Hoey	7/13	8:22	2012C64	6/22	10.0	23.5	9.96	-191.9	P/F	L/F
CCV	Charlie Hoey	7/13	14:20	4012K91	12/22	4.0	23.7	3.96	156.9	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 +167.9, slope from 4 to 7 +179.8 (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: 04/26/21

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	7/13	8:24	0.00	0.00	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)

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

Meter ID:

Hodal

RQ:

2021-07-05-63
2021-03-22-19

Project:

SMP

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 4/26/2021

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.	Andrew Luerling	7/15/21	8:25	23.7	759	8.5	8.45	100.3%	-	1.06	0/F	0/F
ICV	"	"	8:27	23.8	759	8.4	8.45	99.9%	-	1.06	0/F	0/F
CCV	"	"	1400	27.7	760	7.9	7.88	100.3%	-	1.06	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.	Andrew Luerling	7/15/21	8:29	1105E62	05/2023	1000	1008	0/F	0/F
ICV	"	"	8:32	1102792	01/2023	100	97.8	0/F	0/F
CCV	"	"	1402	2009A62	08/2022	50,000	49,777	0/F	0/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.	Andrew Luerling	7/15/21	8:34	2101B07	12/2022	7.0	23.6	7.00	-19.1	0/F	0/F
Calibr.	"	"	8:36	4012K91	12/2022	4.0	23.6	3.94	153.8	0/F	0/F
Calibr.	"	"	8:37	2012C64	6/2022	10.0	23.6	9.95	-189.2	0/F	0/F
ICV	"	"	8:38	2012C64	6/2022	10.0	23.6	9.99	-189.7	0/F	0/F
CCV	"	"	1405	4012K91	12/2022	4.0	23.6	4.11	151.1	0/F	0/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 $+170.1$, slope from 4 to 7 $+176.9$ (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: 4/26/21

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	Andrew Luerling	7/15/21	8:39	0.00	0.00	0/F	0/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)

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

Meter ID:

Hodor

RQ:

2021-08-02-82

Project:

SMP

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

7/22/21

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	8/4/21	8:32	24.4	756.4	8.3	8.3	98.8		1.08	P/F	L/F
ICV	"	"	8:34	24.3	756.3	8.3	8.3	99.9		1.08	P/F	L/F
CCV	Andrew Luerig	"	1339	22.5	757	8.6	8.61	99.4	-	1.08	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.	Charlie Hoey	8/4/21	8:36	1105E62	5/23	1000	1006	P/F	L/F
ICV	"	"	8:39	1102792	1/23	100	97.5	P/F	L/F
CCV	Andrew Luerig	8/4/21	1341	2009A62	3/2023	50,000	49,194	P/F	L/F
CCV					2022			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	8/4/21	8:42	2101B07	12/22	7.0	23.6	7.09	-22.1	P/F	L/F
Calibr.	"	"	8:44	2104A60	3/23	4.0	23.6	4.02	156.2	P/F	L/F
Calibr.	"	"	8:48	2012C64	6/22	10.0	23.9	10.01	-191.3	P/F	L/F
ICV	"	"	8:50	2012C64	6/22	10.0	23.8	9.98	-191.7	P/F	L/F
CCV	Andrew Luerig	"	1344	2104A60	3/2023	4.0	23.5	4.03	152.6	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 +169.2, slope from 4 to 7 +178.3 (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: 7/22/21

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	8/4/21	8:52	0.00	0.00	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)

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

Meter ID: HODOR

RQ: 2021-08-02-80

Project: SMP

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 7/22/21

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	8/11/21	8:08	23.0	758.4	8.6	8.6	95.7		1.12	P / F	L / F
ICV	"	"	8:10	23.0	758.5	8.6	8.6	100.5		1.12	P / F	L / F
CCV	Andrew Luning	8/11/21	13:22	26.9	751	8.0	8.30	103.3	-	1.12	P / F	L / F
CCV							8.21				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.	Charlie Hoey	8/11/21	8:12	1105E62	5/23	1000	987	P / F	L / F
ICV	"	"	8:17	1102792	1/23	100	98.1	P / F	L / F
CCV	Andrew Luning	8/11/21	13:24	1105C52	05/2023	5000	5029	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	8/11/21	8:20	2101B07	12/22	7.0	22.6	7.07	-23.6	P / F	L / F
Calibr.	"	"	8:22	2104A60	3/23	4.0	22.5	3.95	156.4	P / F	L / F
Calibr.	"	"	8:25	2012C64	6/22	10.0	22.7	9.96	-189.8	P / F	L / F
ICV	"	"	8:27	2012C64	6/22	10.0	22.7	9.96	-190.3	P / F	L / F
CCV	Andrew Luning	8/11/21	13:28	2104A60	3/2023	4.0	22.3	4.15	146.3	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 -106.2, slope from 4 to 7 -180.0 (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: 7/22/21

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	8/11/21	8:29	0.00	0.00	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)

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

Meter ID: 4020

RQ: FO 2021-08-16-22

Project: SMP-CM

- 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 07/22/2021

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.	Drew Little	08/16/21	0900	22.8	754.6	8.6	8.60	100.1	—	1.08	P/F	L/F
ICV	//	//	0906	22.8	754.6	8.6	8.63	100.2	—	1.08	P/F	L/F
CCV	//	//	1422	23.3	754.1	8.5	8.54	100.1	—	—	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.	Drew Little	08/16/21	0908	1105E62	05/23	1000	1000	P/F	L/F
ICV	//	//	0910	1102792	01/23	100	99.7	P/F	L/F
CCV	//	//	1426	2009A62	08/12	50 K	49755	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.	Drew Little	08/16/21	0912	2101B07	12/22	7.0	23.0	7.01	-20.2	P/F	L/F
Calibr.	I	I	0914	2104A60	03/23	4.0	23.0	4.00	157.5	P/F	L/F
Calibr.	I	I	0916	2012C64	06/22	10.0	23.1	10.00	-191.8	P/F	L/F
ICV	I	I	0918	2012C64	06/22	10.0	23.0	10.00	-191.8	P/F	L/F
CCV	I	I	1428	264A60	03/23	4.0	22.7	4.08	157.1	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 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: 07/22/2021

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	Drew Little	08/16/21	0920	0.00	0.00	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)

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

Meter ID: HODOR

RQ: 2021-08-02-79

Project: SMP

- 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 7/22/21

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	8/19/21	8:32	23.0	758.2	8.6	8.5	100.0		1.07	P/F	L/F
ICV	Charlie Hoey	8/19/21	8:33	23.0	758.3	8.6	8.5	99.8		1.07	P/F	L/F
CCV	S. Fischer	"	"	27.5	758		7.85	99.4	—	1.07	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.	Charlie Hoey	8/19/21	8:35	1105E62	5/23	1000	1023	P/F	L/F
ICV	Charlie Hoey	8/19/21	8:37	1102792	1/23	100	97.5	P/F	L/F
CCV	S. Fischer	"	"	1408	05/23	1000	971	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	8/19/21	8:41	2101B07	12/22	7.0	23.2	7.18	-27.5	P/F	L/F
Calibr.	Charlie Hoey	8/19/21	8:44	2104A60	3/23	4.0	22.8	4.15	151.2	P/F	L/F
Calibr.	Charlie Hoey	8/19/21	8:47	2012C64	6/22	10.0	23.4	10.01	-193.2	P/F	L/F
ICV	Charlie Hoey	8/19/21	8:51	2012C64	6/22	10.0	23.6	9.96	-193.2	P/F	L/F
CCV	S. Fischer	"	"	1410	03/23	4.	22.6	3.86	157.4	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 -165.7, 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: 7/22/21

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	8/19/21	8:53	0.00	0.00	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)

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

Meter ID: HODOR

RQ: 2021-08-16-60
2021-08-02-79
2021-08-16-23 (10)

Project: SMP

- 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 7/22/21

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	8/23/21	8:03	22.8	756.0	8.6	8.6	97.6		1.09	P / F	L / F
ICV	Charlie Hoey	8/23/21	8:05	22.9	756.1	8.5	8.6	99.8		1.09	P / F	L / F
CCV	Charlie Hoey	8/23/21	14:54	26.9	755.7	7.9	8.0	101.4		1.09	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.	Charlie Hoey	8/23/21	8:07	1105E62	5/23	1000	963	P / F	L / F
ICV	Charlie Hoey	8/23/21	8:10	1102792	1/23	100	97.4	P / F	L / F
CCV	Charlie Hoey	8/23/21	14:56	1107044	6/23	100000	102490	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	8/23/21	8:12	2101B07	12/22	7.0	22.8	7.12	-29.0	P / F	L / F
Calibr.	Charlie Hoey	8/23/21	8:14	2104A60	3/23	4.0	22.6	4.04	147.5	P / F	L / F
Calibr.	Charlie Hoey	8/23/21	8:17	2012C64	6/22	10.0	22.8	9.99	-194.7	P / F	L / F
ICV	Charlie Hoey	8/23/21	8:19	2012C64	6/22	10.0	22.8	9.97	-194.3	P / F	L / F
CCV	Charlie Hoey	8/23/21	15:05	2104A60	3/23	4.0	23.0	3.89	153.3	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 -165.7, slope from 4 to 7 -176.5 (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: 7/22/21

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	8/23/21	8:21	0.00	0.00	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)

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

Meter ID:

Hedco

RQ:

2021-08-23-45
2021-06-14-840

Project:

SMP

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

7/22/2021

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.	Andrew Luering	8/25/21	740	23.1	757	8.5	8.52	101.1%	-	1.08	Ⓟ / Ⓡ	Ⓡ / Ⓡ
ICV	"	"	742	23.1	757	8.5	8.54	99.7%	-	1.08	Ⓟ / Ⓡ	Ⓡ / Ⓡ
CCV	Charlie Hoey	8/25/21	1534	27.1	756.7	7.9	7.91	99.4		1.08	Ⓟ / Ⓡ	Ⓡ / Ⓡ
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.	Andrew Luering	8/25/21	745	110SE62	5/2023	1000	1016	Ⓟ / Ⓡ	Ⓡ / Ⓡ
ICV	Andrew Luering	8/25/21	747	110L742	1/2023	100	99.0	Ⓟ / Ⓡ	Ⓡ / Ⓡ
CCV	Charlie Hoey	8/25/21	1537	2009AV2	08/22	50000	48035	Ⓟ / Ⓡ	Ⓡ / Ⓡ
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	8/25/21	749	2101B07	12/2022	7.0	23.1	76.96	-22.5	Ⓟ / Ⓡ	Ⓡ / Ⓡ
Calibr.	"	"	752	2104A60	3/2023	4.0	22.9	3.85	155.6	Ⓟ / Ⓡ	Ⓡ / Ⓡ
Calibr.	"	"	754	202C64	6/2022	10.0	23.0	9.91	-191.4	Ⓟ / Ⓡ	Ⓡ / Ⓡ
ICV	"	"	756	2012C64	6/2022	10.0	23.0	9.97	-191.8	Ⓟ / Ⓡ	Ⓡ / Ⓡ
CCV	Charlie Hoey	8/25/21	1541	2104A60	3/23	4.0	23.2	4.09	149.9	Ⓟ / Ⓡ	Ⓡ / Ⓡ
CCV										P / F	L / F

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

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 -168.9, slope from 4 to 7 -178.1 (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: 7/22/2021

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	Andrew Luering	8/25/21	759	0.00	0.00	Ⓟ / Ⓡ	Ⓡ / Ⓡ

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)

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

Meter ID:

H200

RQ:

2021-08-23-53

Project:

SMP

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 07/22/2021

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.	Drew Lillard	08/26/21	0930	23.3	757	8.5	8.51	99.8	—	1.08	P/F	L/F
ICV	//	//	0934	23.3	757	8.5	8.51	99.7	—	1.05	P/F	L/F
CCV	Andrew Luering	8/26/21	1557	25.1	755	8.2	8.22	99.7	—	1.08	P/F	L/F
CCV			1457								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.	Drew Lillard	08/26/21	0936	1105E62	05/23	1000	1000	P/F	L/F
ICV	//	//	0938	1102792	01/23	100	101.3	P/F	L/F
CCV	Andrew Luering	8/26/21	1559	1105C52	05/2023	5000	4997	P/F	L/F
CCV			1459					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.	Drew Lillard	08/26/21	0940	210039	10/23	7.0	23.2	7.01	-23.1	P/F	L/F
Calibr.	I		0942	2104A60	03/23	4.0	23.1	4.01	157.3	P/F	L/F
Calibr.	I		0944	1102792	01/23	10.0	23.1	10.00	-192.4	P/F	L/F
ICV	I		0946	1102792	01/23	10.0	23.2	10.04	-193.1	P/F	L/F
CCV	Andrew Luering	8/26/21	1501	2104A60	03/2023	4.0	22.4	3.98	155.6	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 ± 50 ;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 -169.3, slope from 4 to 7 180.4 (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: 07/22/2021

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	Drew Lillard	08/26/21	0948	0.00	0.00	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)

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

Meter ID: Hobo

RO:

Project: SMP

- 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 07/22/2021

DO FDEP 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.	Drew Liddick	08/30/21	0900	22.7	757	8.6	8.59	99.7	—	1.08	☒ F	☒ F
ICV			0904	22.7	757	8.6	8.60	99.7	—	1.08	☒ F	☒ F
CCV			1600	27.4	757	7.9	7.84	99.4	—	—	☒ F	☒ 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.	Drew Liddick	08/30/21	0906	1105E62	05/23	1000	1000	☒ F	☒ F
ICV			0908	1102792	01/23	100	101.1	☒ F	☒ F
CCV			1604	1107644	06/23	100K	104190	☒ F	☒ F
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP FT 1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	08/30/21	0910	210039	10/23	7.0	23.3	7.01	-23.2	☒ F	☒ F
Calibr.			0912	2104A60	03/23	4.0	23.3	4.01	155.4	☒ F	☒ F
Calibr.			0914	2012064	06/22	10.0	23.3	10.01	192.3	☒ F	☒ F
ICV			0916	2012064	06/22	10.0	23.3	10.00	-192.6	☒ F	☒ F
CCV			1606	2104A60	03/23	4.0	22.4	3.97	156.4	☒ F	☒ 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 10 169.1, slope from 4 to 7 178.6 (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: 07/22/2021

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	Drew Liddick	08/30/21	0918	0.00	0.00	☒ F	☒ 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)

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

Meter ID: HODOR

RQ: 2021-08-30-44

Project: SMP

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 7/22/21

DO DEP SOP FT 1500	Name	Date	Time GT-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	9/17/21	8:48	23.2	755.0	8.5	8.5	96.0		1.11	P/F	L/F
ICV	Charlie Hoey	9/17/21	8:50	23.2	755.1	8.5	8.5	99.5		1.11	P/F	L/F
CCV	Andrew Luering	"	12:40	25.5	755	8.1	8.37	102.5	-	1.11	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 GT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	9/17/21	8:52	1105 E62	5/123	1000	999	P/F	L/F
ICV	Charlie Hoey	9/17/21	8:54	1102792	1/123	100	99.1	P/F	L/F
CCV	Andrew Luering	"	12:48	1105 CS2	5/2023	5000	5046	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	9/17/21	8:56	210039	10/123	7.0	23.4	7.16	-28.2	P/F	L/F
Calibr.	Charlie Hoey	9/17/21	8:58	2104 A60	3/123	4.0	23.0	4.18	144.4	P/F	L/F
Calibr.	Charlie Hoey	9/17/21	9:00	2012 C64	6/122	10.0	23.3	10.07	-196.8	P/F	L/F
ICV	Charlie Hoey	9/17/21	9:02	2012 C64	6/122	10.0	23.3	9.99	-197.0	P/F	L/F
CCV	Andrew Luering	9/17/21	12:50	2104 A60	3/2023	4.0	22.4	3.84	153.5	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 -168.6, slope from 4 to 7 -172.6 (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: 7/22/21

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Charlie Hoey	9/17/21	9:03	0.00	0.00	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)

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

Meter ID: HODOR

RQ: 2012-09-06-48

Project: SMP

- 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 7/22/21

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	9/9/21	8:31	22.3	754.3	8.6	8.6	99.3		1.08	(P) F	(L) F
ICV	Charlie Hoey	9/9/21	8:34	22.4	754.3	8.6	8.6	99.4		1.08	(P) F	(L) F
CCV	S. Fischer	9/9/21	12:44	26.6	754	8.0	8.0	99.6		1.08	(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.	Charlie Hoey	9/9/21	8:38	1108F51	8/23	1000	1007	(P) F	(L) F
ICV	Charlie Hoey	9/9/21	8:40	1102792	1/23	100	98.5	(P) F	(L) F
CCV	S. Fischer	9/9/21	12:44	1107644	06/23	100,000	103388	(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	9/9/21	8:42	210039	10/23	7.0	23.0	7.10	-26.1	(P) F	(L) F
Calibr.	Charlie Hoey	9/9/21	8:45	2104A60	3/23	4.0	22.5	3.94	148.1	(P) F	(L) F
Calibr.	Charlie Hoey	9/9/21	8:52	2012C64	6/22	10.0	22.7	9.99	-196.8	(P) F	(L) F
ICV	Charlie Hoey	9/9/21	8:54	2012C64	6/22	10.0	22.7	9.99	-196.5	(P) F	(L) F
CCV	S. Fischer	9/9/21	12:48	2104A60	03/23	4.	21.6	3.85	155.6	(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 +170.7, slope from 4 to 7 +174.2 (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: 7/22/21

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	9/9/21	8:56	0.00	0.00	(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)

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

Meter ID: Hodor RQ: 2021-09-13-55 Project: SMP

- 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 7/22/2021

DO DEP SOP FT 1500	Name	Date	Time GT-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.	Andrew Luering	9/16/21	812	22.7	754	8.6	8.56	99.3	-	1.08	0/F	0/F
ICV	"	"	814	22.7	755	8.6	8.56	99.3	-	1.08	0/F	0/F
CCV	S Fischer	9/16/21	1243	25.2	756	8.2	8.16	99.2	-	1.08	0/F	0/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 GT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	9/16/21	817	1108F51	8/2023	1000	995	0/F	0/F
ICV	"	9/16/21	820	1102792	1/2023	100	97.3	0/F	0/F
CCV	S Fischer	9/16/21	1245	1108F51	08/23	1000	997	0/F	0/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	9/16/21	825	210039	10/2023	7.0	22.8	7.06	-24.0	0/F	0/F
Calibr.	"	"	827	2107E46	7/2023	4.0	22.6	4.0	154.3	0/F	0/F
Calibr.	"	"	830	2012C64	6/2022	10.0	22.8	9.95	-192.9	0/F	0/F
ICV	"	"	832	2012C64	6/2022	10.0	22.8	9.98	-193.6	0/F	0/F
CCV	S Fischer	9/16/21	1247	2107E46	07/23	4.	22.6	4.03	152.1	0/F	0/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 -168.9, slope from 4 to 7 -178.3 (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: 7/22/2021

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Andrew Luering	9/16/21	833	0.00	0.00	0/F	0/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)

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

Meter ID:

Hodor

RQ:

2021-07-19-34

Project:

Deployable HAB/SMP

- 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 07/22/2021

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.	D. L. Lick	09/27	0900	23.6	758	8.5	8.5	99.7	—	1.10	ⓧ/F	ⓧ F
ICV			0902	23.6	758	8.5	8.5	99.7	—	1.10	ⓧ/F	ⓧ F
CCV	Andrew Luerding	9/27/21	1548	25.4	757	8.2	8.28	100.9	—	1.10	ⓧ/F	ⓧ 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.	D. L. Lick	09/27	0904	1108FS1	08/23	1000	1000	ⓧ/F	ⓧ F
ICV			0906	1102792	01/23	100	99.6	ⓧ/F	ⓧ F
CCV	Andrew Luerding	9/27/21	1550	1105CS1	5/2023	50,000	49,649	ⓧ/F	ⓧ 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.	D. L. Lick	09/27	0908	212039	10/23	7.0	23.9	7.01	-27.4	ⓧ/F	ⓧ F
Calibr.			0910	2107E46	07/23	4.0	23.8	4.00	152.6	ⓧ/F	ⓧ F
Calibr.			0912	2012C64	06/22	10.0	24.0	10.01	-195.3	ⓧ/F	ⓧ F
ICV			0914	2012C64	06/22	10.0	24.0	10.01	-195.5	ⓧ/F	ⓧ F
CCV	Andrew Luerding	9/27/21	1551	2107E46	7/2023	4.0	23.7	3.96	153.1	ⓧ/F	ⓧ 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 $+167.9$, slope from 4 to 7 180 (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: 07/22/2021

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	D. L. Lick	09/27	0916	0.00	0.00	ⓧ/F	ⓧ 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)

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

Meter ID: 1400

RQ: 2021-06-28-45

Project: Cyclospora

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 7/22/2021

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.	Andrew Luerling	10/5/21	758	23.0	755	8.5	8.52	99.3	-	1.09	P/F	L/F
ICV	"	"	800	23.1	755	8.5	8.52	99.4	-	1.09	P/F	L/F
CCV	Drew Liddick	"	1645	26.0	755	8.1	8.10	100.0	-	1.09	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. ET 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Luerling	10/5/21	802	1108FS1	8/2023	1000	1000	P/F	L/F
ICV	"	10/5/21	805	1102792	1/2023	100	97.9	P/F	L/F
CCV	Drew Liddick	"	1648	1108FS1	8/2023	1000	1001.1	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP ET 1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luerling	10/5/21	807	210039	10/2023	7.0	23.3	7.01	-25.4	P/F	L/F
Calibr.	"	"	809	2107E46	7/2023	4.0	23.3	4.00	154.5	P/F	L/F
Calibr.	"	"	811	2012C64	6/2022	10.0	23.4	10.02	-144.6	P/F	L/F
ICV	"	"	812	2012C64	6/2022	10.0	23.4	9.99	-144.8	P/F	L/F
CCV	Drew Liddick	"	1648	2107E46	7/2023	4.0	23.7	4.08	150.1	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 -169.2, slope from 4 to 7 -179.9 (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: 7/22/2021

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	Andrew Luerling	10/5/21	814	0.00	0.00	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:

20-202-10-11-66

Meter ID:

Had or

RQ

2021-10-11-29

Project:

HAB/SMP

- ### Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 07/22/21DO 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.

Conductivity Acceptance criteria $\pm 5\%$

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 +170.2, slope from 4 to 7 178.7 (both must be between 165 and 180 mV)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 07/22/21

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

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

Form effective August 1, 2018

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: H200

RQ:

Project: SHP

- 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 07/22/21

DO FDEP 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.	D. L. J. J.	07/14/21	1030	24.0	754.8	8.4	8.36	99.7	—	1.08	P/F	L/F
ICV	//	//	1034	24.0	754.8	8.4	8.36	99.7	—	1.08	P/F	L/F
CCV	//	//	1604	25.7	754.8	8.1	8.07	99.6	—	1.08	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.	D. L. J. J.	07/14/21	1036	1108F51	08/23	1000	1000	P/F	L/F
ICV			1038	1102792	01/23	100	98.2	P/F	L/F
CCV			1608	1108F51	08/23	1000	1009	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP 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.	D. L. J. J.	07/14/21	1040	210039	10/23	7.0	23.7	7.01	-23.8	P/F	L/F
Calibr.			1042	2107E46	07/23	4.0	23.6	4.00	154.2	P/F	L/F
Calibr.			1044	2012C64	01/22	10.0	23.7	10.01	-194.2	P/F	L/F
ICV			1046	2012C64	01/22	10.0	23.7	10.01	-194.4	P/F	L/F
CCV			1610	2107E46	07/23	4.0	23.5	4.05	150.7	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 10 170.4, slope from 4 to 7 178 (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: 07/22/21

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	D. L. J. J.	07/14/21	1048	0.00	0.00	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)

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

Meter ID:

Hodg

RQ:

Project:

AMP

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

07/22/21

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.	D. Liddick	10/18/21	0800	22.5	756.1	8.6	8.61	99.5	—	1.08	Ⓟ F	Ⓛ F
ICV			0806	22.5	756.1	8.6	8.61	99.7	—	1.08	Ⓟ F	Ⓛ F
CCV			1620	26.3	754.4	8.0	8.03	99.6	—	1.08	Ⓟ F	Ⓛ 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. ET-1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/18/21	0808	1108F51	08/23	1000	1000	Ⓟ F	Ⓛ F
ICV			0810	1102792	01/23	100	99.1	Ⓟ F	Ⓛ F
CCV			1624	1107644	06/23	100,000	101710	Ⓟ F	Ⓛ F
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP ET-1100	Name	Date	Time GT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/18/21	0812	210039	10/23	7.0	23.5	7.01	-23.5	Ⓟ F	Ⓛ F
Calibr.			0814	2107E46	07/23	4.0	23.5	4.00	154.5	Ⓟ F	Ⓛ F
Calibr.			0816	2012564	06/22	10.0	23.9	10.00	-93.8	Ⓟ F	Ⓛ F
ICV			0818	2012564	06/22	10.0	23.8	10.00	-93.8	Ⓟ F	Ⓛ F
CCV			1628	2107E46	07/23	4.0	23.4	4.01	154.7	Ⓟ F	Ⓛ 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 -170.3 , slope from 4 to 7 178 (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: 07/22/21

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	D. Liddick	10/18/21	0820	0.00	0.00	Ⓟ F	Ⓛ 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)

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

Meter ID: Hodor

RQ:

Project: SMP

- 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 10/19/2021

DO FDEP SOP FD 1500	Name	Date	Time GT-ET	Temp °C	Baro- meter mmHg	D.O. Charge mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/21/21	0900	22.7	759.0	8.6	8.6	99.9	—	1.08	P/F	L/F
ICV	"	"	0904	22.8	759.0	8.6	8.6	99.9	—	1.08	P/F	L/F
CCV			1/6/14	25.7	757.5	8.1	2.12	99.7	—	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. Conduct. FD 3200	Name	Date	Time GT-ET	Lot#	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/21/21	0906	1108F51	08/23	1000	1000	P/F	L/F
ICV	"	"	0908	1102792	01/23	100	98.3	P/F	L/F
CCV			1/6/18	108F51	08/23	1000	1005	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP FD 1100	Name	Date	Time GT-ET	Lot#	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/21/21	0910	210039	10/23	7.0	23.4	23.8	-238	P/F	L/F
Calibr.	"	"	0912	2107E44	07/23	4.0	23.5	4.01	154.2	P/F	L/F
Calibr.	"	"	0914	2012C64	06/22	10.0	23.5	10.00	-193.9	P/F	L/F
ICV	"	"	0916	2012C64	06/22	10.0	23.6	9.99	-194.3	P/F	L/F
CCV			1/6/20	2107E44	07/23	4.0	23.5	4.05	150.6	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)

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: 10/19/2021

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	D. Liddick	10/21/21	0918	0.00	0.00	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)

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

Meter ID: 420

RQ:

Project: SMR

- 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 10/19/21

DO FDEP SOP FT 1500	Name	Date	Time GT-ET	Temp °C	Baro- meter mmHg	DO Chart mg/L	Meter DO mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	D. L. Lick	10/25/21	0930	23.1	755	8.5	8.5	99.7	—	1.08	P/F	L/F
ICV	"	"	0934	23.2	755	8.5	8.5	99.5	—	1.08	P/F	L/F
CCV	"	"	1620	24.3	753	8.3	8.4	99.9	—	1.08	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 200	Name	Date	Time GT-ET	Lot#	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	D. L. Lick	10/25/21	0936	1108F51	08/23	1000	1000	P/F	L/F
ICV	"	"	0938	1102792	01/23	150	162.4	P/F	L/F
CCV	"	"	1624	1105C51	05/23	50,000	49654	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP FT 1100	Name	Date	Time GT-ET	Lot#	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	D. L. Lick	10/25/21	0940	210039	10/23	7.0	23.7	7.01	-25.5	P/F	L/F
Calibr.	"	"	0942	2107E46	07/23	4.0	23.6	4.00	153.5	P/F	L/F
Calibr.	"	"	0944	2012C64	06/22	10.0	23.7	10.00	-194.7	P/F	L/F
ICV	"	"	0946	2012C64	06/22	10.0	23.8	10.00	-194.8	P/F	L/F
CCV	"	"	1626	2107E46	07/23	4.0	23.2	4.01	151.6	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 179 slope from 4 to 7 179 (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: 10/19/21

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	D. L. Lick	10/25	0948	0.00	0.00	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)

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

Meter ID: Haber

RQ:

Project: SMP-LM

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:

DO DEP SOP FT 1500	Name	Date	Time GT-ET	Temp °C	Baro meter mmHg	DO Chart m/L	Meter DO m/L	SPDO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/27/21	0940	22.7	753	8.5	8.51	99.9	—	1.07	P/F	L/F
ICV			0944	22.7	753	8.5	8.53	99.9	—	1.07	P/F	L/F
CCV			1430	24.0	751	8.3	8.31	99.4	—	1.07	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 GT-ET	Lot#	Expir. Date	Standard umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/27/21	0946	1108F51	08/23	1000	1000	P/F	L/F
ICV			0948	1102792	01/23	100	98.3	P/F	L/F
CCV			1434	1105651	05/23	50,000	49747	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time GT-ET	Lot#	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	D. Liddick	10/27/21	0950	210039	10/23	7.0	23.6	7.01	-23.1	P/F	L/F
Calibr.			0952	2107E46	07/23	4.0	23.6	4.00	153.6	P/F	L/F
Calibr.			0954	2012C64	06/22	10.0	23.8	10.01	-194.4	P/F	L/F
ICV			0956	2012C64	06/22	10.0	23.8	10.00	-194.8	P/F	L/F
CCV			1436	2107E46	07/23	4.0	23.9	4.04	151.1	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)

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	D. Liddick	10/27/21	0958	0.00	0.00	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)

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

Meter ID: Hodor

RQ:

Project: SMP/CM

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 10/19/2021

DO FDEP SOP FD 1500	Name	Date	Time GT-ET	Temp °C	Baro- meter mmHg	DO Chart m/L	Meter DO m/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	11/1/21	1000	22.9	759.0	8.6	8.58	99.8	—	1.07	(P) F	(L) F
ICV			1004	22.9	759.1	8.6	8.58	99.9	—	1.07	(P) F	(L) F
CCV			1400	23.9	757.1	8.4	8.40	99.7	—	1.07	(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. FD 1200	Name	Date	Time GT-ET	Lot#	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	11/1/21	1006	1108F51	08/23	1000	1000	(P) F	(L) F
ICV			1008	1102792	21/23	100	99.6	(P) F	(L) F
CCV			1404	1105554	10/6/23	100,000	102146	(P) F	(L) F
CCV				1107644				P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH FDEP SOP FD 1100	Name	Date	Time GT-ET	Lot#	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew Liddick	11/1/21	1010	210039	10/23	7.0	23.0	7.01	-24.2	(P) F	(L) F
Calibr.			1012	2107E40	07/23	4.0	23.1	4.00	152.9	(P) F	(L) F
Calibr.			1014	1106829	11/22	10.0	23.0	10.00	-198.2	(P) F	(L) F
ICV			1016	1106829	11/22	10.0	23.0	10.00	-198.3	(P) F	(L) F
CCV			1406	2107E40	07/23	4.0	23.2	4.01	152.3	(P) F	(L) F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 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: 10/19/2021

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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass/ Fail	Lab/ Field
Pressure mode in air	Drew Liddick	11/1/21	1018	0.50	0.60	(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)

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

Meter ID: Hodor

RQ:

Project: 64P

- 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 10/19/21

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.	Drew L:22:24	11/15/21	0945	21.1	760	8.9	8.89	100.1	—	1.07	P/F	L/F
ICV			0950	21.1	760	8.9	8.88	100.1	—	1.07	P/F	L/F
CCV			1543	22.5	760	8.6	8.62	99.5	—	1.07	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. ET-1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew L:22:24	11/15/21	0952	1108F51	08/23	1000	1000	P/F	L/F
ICV			0954	102792	01/23	100	99.6	P/F	L/F
CCV	Toda Skoggs	11/15/21	15:50	1105C51	05/23	50000	49650	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP ET-1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Drew L:22:24	11/15/21	0956	210039	10/23	7.0	22.0	7.01	-26.9	P/F	L/F
Calibr.			0958	2107E46	06/23	4.0	22.1	4.00	150.5	P/F	L/F
Calibr.			1000	1106829	11/22	10.0	22.1	10.01	-198.3	P/F	L/F
ICV			1002	1106829	11/22	10.0	22.1	10.01	-198.4	P/F	L/F
CCV	Toda Skoggs	11/15/21	15:51	2107E46	06/23	4.0	22.9	4.01		P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50; mV pH 4 Range +180 $\pm$ 50; mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 -171.4, 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: 10/19/21

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	Drew L:22:24	11/15/21	1004	0.00	0.00	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)

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

Meter ID: Hodor

RQ:

Project: SUP

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 10/17/21

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	D.O. mg/L	%DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Drew L. Ladd	11/16/21	1000	22.1	761	8.7	8.73	100.1	—	1.08	P/F	D/F
ICV	//	//	1004	22.1	761	8.7	8.73	100.1	—	1.08	P/F	L/F
CCV	//	//	1620	21.3	760	8.9	8.88	100.1	—	1.08	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.	Drew L. Ladd	11/16/21	1006	1108F51	08/23	1000	1000	P/F	D/F
ICV	//	//	1008	1102792	01/23	100	99.7	P/F	D/F
CCV	//	//	1626	1105C52	05/23	5000	4880	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.	Drew L. Ladd	11/16/21	1010	210039	10/23	7.0	22.3	7.01	-25.7	P/F	D/F
Calibr.	I	I	1012	2107E46	07/23	4.0	22.4	4.00	151.4	P/F	D/F
Calibr.	I	I	1014	1106829	11/22	10.0	22.4	10.01	-97.8	P/F	D/F
ICV	I	I	1016	1106829	11/22	10.0	22.4	10.01	-98.1	P/F	D/F
CCV	I	I	1628	2107E46	07/23	4.0	22.3	4.02	150.2	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 -172.1, slope from 4 to 7 177.1 (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: 10/19/21

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	Drew L. Ladd	11/16/21	1018	0.00	0.00	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)

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

Meter ID: **HODOR**

RQ: **2021-11-29-36**

Project: **SMP**

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

10/19/2021

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	12/1/21	805	18.3	760.8	9.4	9.36	100.1	-	1.08	P / F	L / F
ICV	"	"	807	17.7	760.8	9.5	9.43	99.4	-	1.08	P / F	L / F
CCV	Andrew Luering	"	1559	21.3	760	8.9	8.82	99.5	-	1.08	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 200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	12/1/21	809	1108F51	8/23	1000	1000	P / F	L / F
ICV	"	"	812	1105C57	5/23	100	104.6	P / F	L / F
CCV	Andrew Luering	"	1602	1108F51	8/2023	1000	1018	P / F	L / F
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	12/1/21	815	213013	4/23	7.01	21.7	7.01	-34.5	P / F	L / F
Calibr.	"	"	818	2107E46	7/23	4.00	21.6	4.00	149.9	P / F	L / F
Calibr.	"	"	820	1100829	11/22	10.04	21.7	10.04	-195.5	P / F	L / F
ICV	"	"	822	1100829	11/22	10.04	21.7	9.96	-195.8	P / F	L / F
CCV	Andrew Luering	"	1603	2107E46	7/2023	4.0	22.2	4.00	146.4	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 **161**, slope from 4 to 7 **184.4** (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: **10/19/2021**

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	12/1/21	824	0.00	0.00	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: