

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: Arva RQ: 2021-01-11-53 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 10/28/2020

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	1/19/2021	8:24	17.9	763.1	9.5	9.49	100.4	-	1.05	Ⓟ/F	Ⓟ/F
ICV	"	"	8:29	18.3	763.1	9.4	9.45	100.4	-	1.05	Ⓟ/F	Ⓟ/F
CCV	"	"	1434	20.4	762.0	9.0	9.05	100.6	-		P/F	L/F
CCV												

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 Luerding	1/19/21	8:33	1007002	07/2022	1,000	1,000	Ⓟ/F	Ⓟ/F
ICV	"	"	8:38	2006988	05/2022	100	100.5	Ⓟ/F	Ⓟ/F
CCV	"	"	1438	1007002	07/2022	1,000	1,000	Ⓟ/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.	Andrew Luerding	1/19/21	8:41	202114	05/2022	7.0	18.8	5.81	-36.6	Ⓟ/F	Ⓟ/F
Calibr.	"	"	8:45	200052	02/2022	4.0	18.8	4.08	129.6	Ⓟ/F	Ⓟ/F
Calibr.	"	"	8:51	196994	11/2021	10.0	18.5	-10.02	-210	Ⓟ/F	Ⓟ/F
ICV	"	"	8:56	196994	11/2021	10.0	18.4	10.13	-209	Ⓟ/F	Ⓟ/F
CCV	"	"	1442	200052	02/2022	4.0	19.6	4.11	130.1	Ⓟ/F	Ⓟ/F
CCV								4.01		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 -173.4, slope from 4 to 7 -166.2 (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 Luerding	1/19/21	8:57	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: A-199

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 Luerig	02/24/21	10:08	22.4	759	8.7	8.67	99.9	-	1.05	☒ F	☒ F
ICV	"	"	10:12	22.5	759	8.6	8.66	99.9	-	1.05	☒ F	☒ 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.	Andrew Luerig	02/24/21	10:14	2009A62	08/2022	50,000	49,988	☒ F	☒ F
ICV	"	"	10:17	2007676	07/2022	100	161	P / ☒ F	☒ 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.	Andrew Luerig	02/24/21	10:23	202114	05/2022	7.0	22.4	46.9	-46.9	P / ☒ F	☒ F
Calibr.						4.		46.9		P / F	L / F
Calibr.						10.				P / F	L / F
ICV										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: _____

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						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: meter failed probe changed out. No sampling

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: Anya

RQ-

Project: 54P

- 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	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
DEP SOP FT 1500												
Calibr.	<u>Drew Liddick</u>	<u>03/15/2021</u>	<u>1000</u>	<u>22.1</u>	<u>758</u>	<u>8.9</u>	<u>8.8</u>	<u>99.5</u>	<u>-</u>	<u>1.05</u>	<u>P/F</u>	<u>L/F</u>
ICV			<u>1004</u>	<u>22.2</u>	<u>753</u>	<u>8.9</u>	<u>8.5</u>	<u>94.5</u>	<u>-</u>	<u>1.05</u>	<u>P/F</u>	<u>L/F</u>
CCV												
CCV												

DO Acceptance criteria from Table ± 0.3 mg/L.
 Optical: DO gain range 0.85 to 1.15 (Pro DSS 0.75 to 1.50); DO charge N/A. Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
 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.	<u>Drew Liddick</u>	<u>03/15/2021</u>	<u>1506</u>	<u>1102193</u>	<u>01/23</u>	<u>1000</u>	<u>1000</u>	<u>P/F</u>	<u>L/F</u>
ICV				<u>1008</u>	<u>1102192</u>	<u>01/23</u>	<u>106</u>	<u>P/F</u>	<u>L/F</u>
CCV									
CCV									

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 Liddick</u>	<u>03/15/2021</u>				<u>7.</u>				<u>P/F</u>	<u>L/F</u>
Calibr.						<u>4.</u>				<u>P/F</u>	<u>L/F</u>
Calibr.						<u>10.</u>				<u>P/F</u>	<u>L/F</u>
ICV										<u>P/F</u>	<u>L/F</u>
CCV										<u>P/F</u>	<u>L/F</u>
CCV										<u>P/F</u>	<u>L/F</u>

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

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 Liddick</u>	<u>03/15/2021</u>				<u>P/F</u>	<u>L/F</u>

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: Anya RQ- Project: 548

- 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 L. Dick	03/17	0900	22.8	758	8.4	8.4	99.8	—	1.65	☒ F	☒ F
ICV			0904	22.8	758	8.4	8.5	99.7	—	1.65	☒ F	☒ 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 L. Dick	03/17	0906	1102199	01/23	1000	1000	☒ F	☒ F
ICV			0908	2007676	07/22	100	100.4	☒ F	☒ 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 L. Dick	03/17	0910	2101807	12/22	7.0	22.7	7.61	-11.5	☒ F	☒ F
Calibr.			0914	2011891	10/22	4.0	22.8	4.60	168.4	☒ F	☒ F
Calibr.			0916	201473	05/22	10.0	22.7	10.01	-186.8	☒ F	☒ F
ICV			0920	201473	05/22	10.0	22.7	10.01	-186.0	☒ F	☒ 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 10 175.3, 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: 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 L. Dick	03/17	0924	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: Hob/Anyt RQ: 2021-03-15-62 Project: 3M4CM

- 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	DO Chart mg/L	Meter DO mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Drew L122.4	03/22/21	0746	20.3	757	8.9	8.9	99.7	—	1.05	Ⓟ/F	Ⓟ/F
ICV	//	//	0742	20.3	757	8.9	8.9	99.7	—	1.05	Ⓟ/F	Ⓟ/F
CCV	//	//	1645	22.7	757	8.6	8.57	100.2	—	1.05	Ⓟ/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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew L122.4	03/22/21	0744	1102199	01/23	1000	1000	Ⓟ/F	Ⓟ/F
ICV	//	//	0746	2007676	07/22	100	100.1	Ⓟ/F	Ⓟ/F
CCV	//	//	1648	2009162	08/22	50K	50032	Ⓟ/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.	Drew L122.4	03/22/21	0748	2011001	12/22	7.0	22.3	7.01	-12.3	Ⓟ/F	Ⓟ/F
Calibr.	I	I	0750	2011891	10/22	4.0	22.3	4.01	165.5	Ⓟ/F	Ⓟ/F
Calibr.	I	I	0752	201473	05/22	10.0	22.3	10.01	-188.1	Ⓟ/F	Ⓟ/F
ICV	I	I	0754	201473	05/22	10.0	22.3	10.04	-188.4	Ⓟ/F	Ⓟ/F
CCV	//	//	1650	2011891	10/22	4.0	22.4	4.00	166.7	Ⓟ/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 -175.8 slope from 4 to 7 177.8 (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	Drew L122.4	03/22/21	0752	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:

Anya

RQ:

2021-04-12-56

Project:

SAP-320B deploy

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.	J. SKAGGS	05/10/21	9:00	23.0	756.8	8.50	8.50	99.0	—	1.06	P/F	L/F
ICV				23.0	756.8	8.56	8.50	99.0	—	1.06	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.	J. SKAGGS	05/10/21						P/F	L/F
ICV								P/F	L/F
CCV								P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.						7.				P/F	L/F
Calibr.						4.				P/F	L/F
Calibr.						10.				P/F	L/F
ICV										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: _____; Date of last verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air						P/F	L/F

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

COMMENTS:

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: Ava

RQ: 2021-05-03-12

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 Luering	5/26/21	8:50	23.2	760	8.5	8.55	100.1	—	1.06	⓪ / F	⓪ / F
ICV	"	"	8:52	23.2	760	8.5	8.56	100.2	—	1.06	⓪ / F	⓪ / F
CCV	S. Fischer	"	1445	27.1	760	8.0	7.95	100.0	—	1.06	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	5/26/21	8:54	1102199	01/2023	1000	997	⓪ / F	⓪ / F
ICV	"	"	8:56	1102792	01/2023	100	99.7	⓪ / F	L / F
CCV	S. Fischer	"	1447	2009762	08/22	50.000	50350	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	5/26/21	8:58	2101807	12/2022	7.0	23.5	7.08	-19.4	⓪ / F	⓪ / F
Calibr.	"	"	9:01	2011891	10/2022	4.0	23.2	3.98	162.3	⓪ / F	⓪ / F
Calibr.	"	"	9:03	2012064	06/2022	10.0	23.3	9.96	-189.9	⓪ / F	⓪ / F
ICV	"	"	9:04	2012064	06/2022	10.0	23.2	9.97	-189.0	⓪ / F	⓪ / F
CCV	S. Fischer	"	1449	2201891	10/22	4.	22.6	4.06	160.4	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 _____, 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: 4/26/2021

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	5/26/21	9:06	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: Arya

RQ: 2021-05-31-41

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 Luering	6/1/21	7:44	23.3	758	8.5	8.51	99.2	—	1.07	⓪/F	⓪/F
ICV	"	"	7:45	23.4	758	8.5	8.50	99.8	—	1.07	⓪/F	⓪/F
CCV	S. Fischer	"	15:02	24.5	758	8.3	8.36	100.1	—	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	6/1/21	7:48	1102199	01/2023	1000	995	⓪/F	⓪/F
ICV	"	"	7:49	1102792	01/2023	100	99.7	⓪/F	⓪/F
CCV	S. Fischer	"	15:04	1105C52	05/23	5000	5062	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	6/1/21	7:52	2101 D07	12/2022	7.0	23.4	7.10	-20.6	⓪/F	⓪/F
Calibr.	"	"	7:56	2011891	10/2022	4.0	23.4	4.00	161.8	⓪/F	⓪/F
Calibr.	"	"	7:58	2012064	06/2022	10.0	23.4	9.97	-189.7	⓪/F	⓪/F
ICV	"	"	7:59	2012064	06/2022	10.0	23.4	9.97	-189.9	⓪/F	⓪/F
CCV	S. Fischer	"	15:06	2011891	10/22	4.	22.6	4.12	152.9	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 _____, 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: 4/26/2021

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	6/1/21	8:00	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:

Arya

RQ:

2021-05-31-43

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

4/26/21

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	6/15/21	721	23.2	755	8.5	8.49	99.4	-	1.06	⓪/F	⓪/F
ICV	"	"	723	23.2	755	8.5	8.49	99.4	-	1.06	⓪/F	⓪/F
CCV	S. Fischer	"	1415	28.0	754	7.8	7.77	99.2	/	1.06	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	6/15/21	726	1102199	01/2023	1000	999	⓪/F	⓪/F
ICV	"	"	728	1102792	01/2023	100	99.7	⓪/F	⓪/F
CCV	S. Fischer	"	1417	1907D81	07/21	100,000	103706	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	6/15/21	730	2101B07	12/2022	7.0	23.5	7.11	-21.7	⓪/F	⓪/F
Calibr.	"	"	732	4012K91	12/2022	4.0	23.4	4.05	158.1	⓪/F	⓪/F
Calibr.	"	"	735	2012L64	06/2022	10.0	23.4	10.01	-192.0	⓪/F	⓪/F
ICV	"	"	737	2012L64	06/2022	10.0	23.4	9.97	-192.2	⓪/F	⓪/F
CCV	S. Fischer	"	1419	4012K91	12/22	4.	23.3	3.97	158.6	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 _____, 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: 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 Luering	6/15/21	738	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:

Any

RQ:

06-07-36

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

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	6/17/21	749	22.9	755	8.5	8.53	99.6	-	1.06	0/F	0/F
ICV	"	"	754	23.0	755	8.5	8.52	99.3	-	1.06	0/F	0/F
CCV	"	"	1151	23.3	756	8.6	8.62	99.2	-	1.06	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	6/17/21	756	1102199	01/2023	1000	991	0/F	0/F
ICV	"	"	759	1102792	01/2023	100	101.2	0/F	0/F
CCV	"	"	1153	1105552	05/2023	5000	5635	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	6/17/21	801	2101D07	12/2022	7.0	23.2	7.07	-22.0	0/F	0/F
Calibr.	"	"	803	4012K91	12/2022	4.0	23.1	3.97	158.8	0/F	0/F
Calibr.	"	"	805	2012C64	6/2022	10.0	23.1	9.96	-141.3	0/F	0/F
ICV	"	"	806	2012C61	6/2022	10.0	23.1	9.96	-141.3	0/F	0/F
CCV	"	"	1155	4012K91	12/2022	4.0	22.9	4.04	156.2	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 _____, 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	Andrew Luering	6/17/21	807	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: Arya

RQ: 2021-06-14-41

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 4/26/21

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	6/22/21	8:59	23.3	756	8.5	8.49	99.5	-	1.06	0/F	0/F
ICV	"	"	9:01	23.3	756	8.5	8.49	99.5	-	1.06	0/F	0/F
CCV	S Fischer	"	1315	26.0	755		8.08	99.4	-	1.06	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	6/22/21	9:02	1102199	01/2023	1000	997	0/F	0/F
ICV	"	"	9:05	1102792	01/2023	100	100	0/F	0/F
CCV	S Fischer	"	1317	1105052	05/23	5000	5064	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	6/22/21	9:07	2101B07	12/2022	7.0	23.5	7.08	-21.8	0/F	0/F
Calibr.	"	"	9:09	4012K91	12/2022	4.0	23.3	3.98	159.8	0/F	0/F
Calibr.	"	"	9:11	2012C64	6/2022	10.0	23.4	9.97	-191.4	0/F	0/F
ICV	"	"	9:12	2012C64	6/2022	10.0	23.4	9.97	-191.5	0/F	0/F
CCV	S Fischer	"	1319	4012K91	12/22	4.	23.3	4.05	155.5	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 _____, 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: 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 Luering	6/22/21	9:13	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: Ary 9

RQ: 2021-06-14-42

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 Luering	6/23/21	758	24.3	756	8.3	8.34	99.4	-	1.06	0/F	0/F
ICV	"	"	759	24.2	756	8.3	8.34	99.5	-	1.06	0/F	0/F
CCV	"	"	1624	20.4	758	9.0	9.02	99.7	-	1.06	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	6/23/21	801	1102199	1/2023	1000	1003	0/F	0/F
ICV	"	"	803	1102792	01/2023	100	100.3	0/F	0/F
CCV	"	"	1628	1105C52	05/2023	5000	5016	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	6/23/21	811	2101B07	12/2022	7.0	23.2	7.07	-21.7	0/F	0/F
Calibr.	"	6/23/21	813	4012K91	12/2022	4.0	23.1	3.97	159.6	0/F	0/F
Calibr.	"	"	815	2012C64	6/2022	10.0	23.2	9.97	-191.5	0/F	0/F
ICV	"	"	817	2012C64	6/2022	10.0	23.2	9.97	-191.5	0/F	0/F
CCV	"	"	1630	4012K91	12/2022	4.0	22.9	4.13	150.4	0/F	0/F
CCV								4.13		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	Andrew Luering	6/23/21	818	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: Arya RQ: 2021-06-14-43 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 Luering	6/29/21	748	23.1	758	8.5	8.54	99.2	-	1.06	⓪ / F	⓪ / F
ICV	"	"	750	23.2	758	8.5	8.54	99.9	-	1.06	⓪ / F	⓪ / F
CCV	S. Fischer	"	1430	24.8	758	8.3	8.32	100.2	-	1.06	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	6/29/21	752	1102199	01/2023	1000	1000	⓪ / F	⓪ / F
ICV	"	"	755	1102792	01/2023	100	100.1	⓪ / F	⓪ / F
CCV	S. Fischer	"	1432	1105052	05/23	5000	5052	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	6/29/21	758	2101B09	12/2022	7.0	23.5	7.05	-21.0	⓪ / F	⓪ / F
Calibr.	"	"	800	4012K91	12/2022	4.0	23.4	3.95	160.4	⓪ / F	⓪ / F
Calibr.	"	"	802	2012C64	06/2022	10.0	23.4	9.94	-140.6	⓪ / F	⓪ / F
ICV	"	"	803	2012C64	06/2022	10.0	23.4	9.97	-140.8	⓪ / F	⓪ / F
CCV	S. Fischer	"	1434	4012K91	12/22	4	23.1	3.99	159.3	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 _____, 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: 4/26/2021

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	6/29/21	803	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: Arya

RQ- 2021-07-05-02

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 4/26/21

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	7/7	8:29	23.1	755.3	8.5	8.5	100.3	—	1.06	P/F	L/F
ICV	Charlie Hoey	7/7	8:33	23.3	755.4	8.5	8.5	99.5	—	1.06	P/F	L/F
CCV	Charlie Hoey	7/7	15:50	25	755	8.2	8.2	99.5	—	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.	Charlie Hoey	7/7	8:38	1102199	01/23	1000	1004	P/F	L/F
ICV	Charlie Hoey	7/7	8:43	102797	01/23	100	100.2	P/F	L/F
CCV	Charlie Hoey	7/7	15:55	1105052	05/23	5000	5040	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	7/7	8:47	2101807	12/22	7.0	23.5	7.08	-21.8	P/F	L/F
Calibr.	Charlie Hoey	7/7	8:52	4012K91	12/22	4.0	23.5	4.0	159.7	P/F	L/F
Calibr.	Charlie Hoey	7/7	8:56	2012064	06/22	10.0	23.5	9.99	-192.5	P/F	L/F
ICV	Charlie Hoey	7/7	8:59	2012064	06/22	10.0	23.5	9.97	-192.8	P/F	L/F
CCV	Charlie Hoey	7/7	15:58	4012K91	12/22	4.0	23.4	4.04	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 -170.7, slope from 4 to 7 181.5 (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 4/26/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: 4/26/21 Ch

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	7/7	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:

Arna

RQ:

2021-07-12-39

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

4/26/21

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.	Charlie Hoey	7/19	8:05	23.2	757.9	8.5	8.5	98.2		1.08	P / F	L / F
ICV	Charlie Hoey	7/19	8:08	23.4	757.9	8.5	8.5	99.8		1.08	P / F	L / F
CCV	Charlie Hoey	7/19	15:34	27.9	756.3	7.8	7.98	101.7		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	7/19	8:09	1105E62	5/23	1000	1000	P / F	L / F
ICV	Charlie Hoey	7/19	8:12	1102792	1/23	100	100	P / F	L / F
CCV	Charlie Hoey	7/19	15:36	1105C52	5/23	5000	5012	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.	Charlie Hoey	7/19	8:15	2101B07	12/22	7.0	23.5	7.05	-21.5	P / F	L / F
Calibr.	Charlie Hoey	7/19	8:21	4012K91	12/22	4.0	23.4	3.97	159.4	P / F	L / F
Calibr.	Charlie Hoey	7/19	8:24	2012C64	6/22	10.0	23.5	9.96	-192.1	P / F	L / F
ICV	Charlie Hoey	7/19	8:26	2012C64	6/22	10.0	23.5	9.97	-192.5	P / F	L / F
CCV	Charlie Hoey	7/19	15:39	4012K91	12/22	4.0	23.0	4.06	154.4	P / F	L / F
CCV										P / F	L / F

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

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

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 -170.6 , slope from 4 to 7 -180.9 (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	Charlie Hoey	7/19	8:27	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)

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

Meter ID:

Arya

RQ:

2021-07-19-33
71933 CA

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

4/26/21

DO DEP SOP FT 1500	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.	Charlie Hoey	7/20	8:03	23.1	755.6	8.5	8.5	100.8		1.06	P / F	L / F
ICV	Charlie Hoey	7/20	8:05	23.2	755.5	8.5	8.5	99.6		1.06	P / F	L / F
CCV	Charlie Hoey	7/20	17:04	25.7	754.8	8.1	8.13	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	7/20	8:08	1105E62	5/23	1000	1000	P / F	L / F
ICV	Charlie Hoey	7/20	8:10	1102792	1/23	100	99.3	P / F	L / F
CCV	Charlie Hoey	7/20	17:06	1105C52	5/23	5000	4867	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	7/20	8:13	2101B07	12/22	7.0	23.2	7.1	-23.7	P / F	L / F
Calibr.	Charlie Hoey	7/20	8:16	4012K91	12/22	4.0	23.1	4.02	157.0	P / F	L / F
Calibr.	Charlie Hoey	7/20	8:19	2012C64	6/22	10.0	23.1	10.01	-194.3	P / F	L / F
ICV	Charlie Hoey	7/20	8:21	2012C64	6/22	10.0	23.1	9.97	-194.4	P / F	L / F
CCV	Charlie Hoey	7/20	17:04	4012K91	12/22	4.0	23.6	4.09	151.9	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 -170.6 , slope from 4 to 7 -180.7 (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: 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	Charlie Hoey	7/20	8:23	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: Arya

RQ- 2021-07-05-106

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 07/22/21

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	7/26	8:08	23.3	753.1	8.4	8.4	99.1		1.06	P/F	L/F
ICV	"	"	8:11	23.4	753.1	8.4	8.4	99.2		1.06	P/F	L/F
CCV	"	"	15:51	27.4	752.7	7.8	7.9	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. ET 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	7/26	8:13	1105E62	5/23	1000	998	P/F	L/F
ICV	"	"	8:16	1102792	1/23	100	100	P/F	L/F
CCV	"	"	15:55	1105E62	5/23	1000	990	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.	Charlie Hoey	7/26	8:19	2101B07	12/22	7.0	23.7	7.00	-23.7	P/F	L/F
Calibr.	"	"	8:22	4012K91	12/22	4.0	23.5	3.99	156.5	P/F	L/F
Calibr.	"	"	8:25	2012C64	6/22	10.0	23.6	9.97	-194.6	P/F	L/F
ICV	"	"	8:27	2012C64	6/22	10.0	23.6	9.97	-194.8	P/F	L/F
CCV	"	"	15:57	4012K91	12/22	4.00	23.9	4.16	46.5	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 -170.9, slope from 4 to 7 -180.2 (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: 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	Charlie Hoey	7/26	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:

Arya

RQ:

2021-07-26-76

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	7/29	8:12	23.1	755.3	8.5	8.5	99.4		1.06	P/F	L/F
ICV	"	"	8:14	23.3	755.4	8.5	8.5	99.4		1.06	P/F	L/F
CCV	"	"	13:52	26.2	755.1	8.0	8.04	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	7/29	8:17	1105E62	5/23	1000	999	P/F	L/F
ICV	"	"	8:20	1102792	1/23	100	98.8	P/F	L/F
CCV	"	"	13:55	1105C52	5/23	5000	5012	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	7/29	8:23	2101B07	12/22	7.0	23.6	7.04	-23.6	P/F	L/F
Calibr.	"	"	8:26	2104A60	3/23	4.0	23.5	3.96	157.3	P/F	L/F
Calibr.	"	"	8:29	2012C64	6/22	10.0	23.5	9.95	-194.4	P/F	L/F
ICV	"	"	8:31	2012C64	6/22	10.0	23.5	9.99	-194.8	P/F	L/F
CCV	"	"	13:57	2104A60	3/23	4.0	23.4	4.13	148.2	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 -170.8, slope from 4 to 7 -180.9 (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: 7/22/21

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	7/29	8:33	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: Arya

RQ- 2021-08-02-85

Project: 8MP

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	8:10	23.1	755.2	8.5	8.5	98.8		1.06	P/F	L/F
ICV	"	"	8:12	23.3	755.3	8.5	8.5	99.6		1.06	P/F	L/F
CCV	"	"	15:37	23.6	755.8	8.4	8.4	99.9		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 umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	8/4/21	8:14	1105E62	5/23	1000	1000	P/F	L/F
ICV	"	"	8:17	1102792	1/23	100	98.7	P/F	L/F
CCV	"	"	15:39	1105C52	5/23	5000	4862	P/F	L/F
CCV	"	"	15:41	1102792	1/23	100	100.4	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	8:20	2101B07	12/22	7.0	23.4	7.09	-27.5	P/F	L/F
Calibr.	"	"	8:22	2104A60	3/23	4.0	23.3	3.99	154.1	P/F	L/F
Calibr.	"	"	8:25	2012C64	6/22	10.0	23.3	9.98	-197.0	P/F	L/F
ICV	"	"	8:27	2012C64	6/22	10.6	23.3	9.97	-197.2	P/F	L/F
CCV	"	"	15:44	2104A60	3/23	4.0	23.2	4.14	145.5	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 -169.5, slope from 4 to 7 -181.6 (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 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	8:29	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:

Amya

RQ-

2021-04-05-18

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 Litter	08/09/21	0900	22.7	758.1	8.6	8.6	100.1	—	1.07	P/F	L/F
ICV	//	08/09/21	0904	22.7	758.1	8.6	8.6	100.1	—	1.07	P/F	L/F
CCV		01/2/09/21	1400	24.5	758.1	8.3	8.3	100.2	—	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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew Litter	08/09/21	0906	1105E62	05/23	1000	1000	P/F	L/F
ICV	//	08/09/21	0908	1102792	01/23	100	100.4	P/F	L/F
CCV		08/01/21	1404	2009162	08/22	50K	50035	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 Litter	08/09/21	0910	2101B07	12/22	7.0	22.8	7.01	-26.8	P/F	L/F
Calibr.	//	08/09/21	0912	2012C64	06/22	4.0	22.8	4.00	153.3	P/F	L/F
Calibr.	//	08/09/21	0914	2104A60	03/23	10.0	22.8	10.01	-197.9	P/F	L/F
ICV	//	//	0916	2012C64	06/22	10.0	22.7	10.00	-197.6	P/F	L/F
CCV			1406	2012C64	06/22	4.0	22.5	4.01	150.4	P/F	L/F
CCV				2104A60	03/23					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 -171.1 , 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: 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 Litter	08/09/21	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:

Any

RQ

2021-08-02-82

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 Li214	08/10/21	840	22.5	758	8.6	8.63	99.8	-	1.06	P/F	L/F
ICV	//	//	844	22.5	758	8.6	8.63	99.8	-	1.06	P/F	L/F
CCV	//	//	1510	25.0	758	8.2	8.17	99.8	-	-	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 Li214	08/10/21	846	1105E62	05/23	1000	1000	P/F	L/F
ICV	//	//	848	1102792	01/23	100	100.1	P/F	L/F
CCV	//	//	1514	1107644	06/23	100K	103196	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.	Drew Li214	08/10/21	850	210B07	12/22	7.0	22.8	7.01	-27.2	P/F	L/F
Calibr.	I	I	852	2104A60	03/23	4.0	22.8	4.00	152.7	P/F	L/F
Calibr.	I	I	854	2102C64	06/22	10.0	22.8	10.03	-197.6	P/F	L/F
ICV	I	I	856	2102C64	06/22	10.0	22.8	10.00	-197.3	P/F	L/F
CCV	I	I	1516	2104A60	03/23	4.0	22.3	3.97	152.8	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 -170.1 , slope from 4 to 7 179.7 (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 Li214	08/10/21	858	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 (DEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

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

Meter ID:

Arva

RQ:

2021-07-19-34
2021-08-09-70

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

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	8/16	8:23	22.6	753.6	8.6	8.6	97.5		1.07	P/F	L/F
ICV	"	"	8:26	22.7	753.5	8.5	8.6	99.3		1.07	P/F	L/F
CCV	Charlie Hoey	8/16	15:31	22.5	752.7	8.7	8.7	100.9		1.07	P/F	L/F
CCV						8.6					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.	Charlie Hoey	8/16	8:28	1105E62	5/23	1000	987	P/F	L/F
ICV	"	"	8:31	1102792	1/23	100	98.4	P/F	L/F
CCV	Charlie Hoey	8/16	15:42	2009 A62	8/22	5000	4948	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	8/16	8:33	2101B07	12/22	7.0	22.7	7.09	-27.0	P/F	L/F
Calibr.	"	"	8:36	2104A60	3/23	4.0	22.6	4.05	150.9	P/F	L/F
Calibr.	"	"	8:39	2012C64	6/22	10.0	22.7	9.99	-196.7	P/F	L/F
ICV	"	"	8:41	2012C64	6/22	10.0	22.7	9.98	-197.1	P/F	L/F
CCV	Charlie Hoey	8/16	15:44	2104A60	3/23	4.0	22.2	4.05	147.4	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 $+169.7$, slope from 4 to 7 $+177.9$ (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: 7/22/21

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	8/16	8:43	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:

Anyg

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 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 Liddick	08/17/21	0900	22.2	755	8.7	8.7	99.9	—	1.06	P/F	L/F
ICV			0904	22.2	755	8.7	8.7	99.7	—	1.06	P/F	L/F
CCV			1610	24.6	755	8.3	8.3	99.7	—	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. Cord. 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	08/17/21	0906	1105E62	05/23	1000	1000	P/F	L/F
ICV			0908	1102792	01/23	100	100.2	P/F	L/F
CCV			1616	1105E62	05/23	1000	1011	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	08/17/21	0910	2101B07	12/22	7.0	22.7	7.01	-29.4	P/F	L/F
Calibr.			0912	2104A60	03/23	4.0	22.6	4.00	151.0	P/F	L/F
Calibr.			0914	2025164	06/22	10.0	22.5	10.00	-198.6	P/F	L/F
ICV			0916	2012C64	06/22	10.0	22.5	10.00	-198.6	P/F	L/F
CCV			1618	2104A60	03/23	4.0	22.6	4.06	152.3	P/F	L/F
CCV							21.6			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 Liddick	08/17/21	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:

Arya

RQ:

2021-08-16-61

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	8:13	22.6	757.2	8.6	8.6	99.1		1.06	P/F	L/F
ICV	" "	" "	8:15	22.7	757.2	8.6	8.6	99.9		1.06	P/F	L/F
CCV	Charlie Hoey	8/19/21	13:01	25.5	756.9	8.1	8.1	100.0%		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.	Charlie Hoey	8/19/21	8:17	1105E62	5/23	1000	989	P/F	L/F
ICV	Charlie Hoey	8/19/21	8:19	1102792	1/23	100	98.9	P/F	L/F
CCV	Charlie Hoey	8/19/21	13:03	1105C52	5/23	5000	4983	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	8:21	2101B07	12/22	7.0	22.7	7.06	-28.0	P/F	L/F
Calibr.	Charlie Hoey	8/19/21	8:24	2104A60	3/23	4.0	22.5	4.01	149.0	P/F	L/F
Calibr.	Charlie Hoey	8/19/21	8:26	2012C64	6/22	10.0	22.9	9.97	-197.8	P/F	L/F
ICV	Charlie Hoey	8/19/21	8:28	2012C64	6/22	10.0	22.9	9.98	-197.8	P/F	L/F
CCV	Charlie Hoey	8/19/21	13:06	2104A60	3/23	4.0	22.7	4.02	147.9	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 -169.8 , slope from 4 to 7 -177 (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	8:30	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:

Arya

RQ:

2021-08-23-52

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

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	8/26/21	8:12	23.1	755.0	8.5	8.5	99.4		1.05	P/F	L/F
ICV	Charlie Hoey	8/26/21	8:15	23.2	755.0	8.5	8.5	99.4		1.05	P/F	L/F
CCV	S. Fischer	" "	1700	27.3	754	7.9	7.8	98.4		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. ET 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	8/26/21	8:17	1105E62	5/23	1000	1024	P/F	L/F
ICV	Charlie Hoey	8/26/21	8:19	1102792	1/23	100	96.2	P/F	L/F
CCV	S. Fischer	" "	1702	1105E62	05/23	1000	977	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	8/26/21	8:30	210039	10/23	7.0	22.7	7.07	-27.7	P/F	L/F
Calibr.	Charlie Hoey	8/26/21	8:32	2104A60	3/23	4.0	22.7	4.06	147.8	P/F	L/F
Calibr.	Charlie Hoey	8/26/21	8:35	2012C64	6/22	10.0	22.8	10.01	-199.1	P/F	L/F
ICV	Charlie Hoey	8/26/21	8:37	2012C64	6/22	10.0	22.8	9.98	-199.0	P/F	L/F
CCV	S. Fischer	" "	1704	2104A60	03/23	4.	22.8	3.90	154.1	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 -171.4 , slope from 4 to 7 -175.5 (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:

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	8/26/21	8:39	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: Arya

RQ: 2021-08-30-46

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	8/30/21	8:18	22.8	755.6	8.6	8.6	97.0		1.08	P/F	L/F
ICV	Charlie Hoey	8/30/21	8:21	22.9	755.6	8.5	8.5	99.6		1.08	P/F	L/F
CCV	Charlie Hoey	8/30/21	15:19	23.7	753.3	8.4	8.5	99.8		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. ET 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	8/30/21	8:24	1105 E62	5/23	1000	960	P/F	L/F
ICV	Charlie Hoey	8/30/21	8:27	1102792	1/23	100	100.5	P/F	L/F
CCV	Charlie Hoey	8/30/21	15:22	1105C52		5000	4985	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	8/30/21	8:30	210039	10/23	7.0	23.1	6.97	-23.4	P/F	L/F
Calibr.	Charlie Hoey	8/30/21	8:33	2104A60	5/23	4.0	22.8	3.91	154.3	P/F	L/F
Calibr.	Charlie Hoey	8/30/21	8:36	2012C64	6/22	10.0	22.9	9.95	-197.3	P/F	L/F
ICV	Charlie Hoey	8/30/21	8:38	2012C64	6/22	10.0	22.9	9.98	-197.7	P/F	L/F
CCV	Charlie Hoey	8/30/21	15:24	2104A60	5/23	4.0	22.8	4.14	145.8	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 -173.9, slope from 4 to 7 -177.7 (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	8/30/21	8:39	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:

Anya

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 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 Liddick	09/01	0730	23.5	753	8.4	8.41	99.4	—	1.06	P/F	L/F
ICV	"	"	0734	23.6	753	8.4	8.41	99.6	—	1.06	P/F	L/F
CCV			1640	24.6	753	8.3	8.21	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. 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 Liddick	09/01	0736	1105E62	05/23	1000	1000	P/F	L/F
ICV	"	"	0738	1102792	01/23	100	100	P/F	L/F
CCV			1644	1105E62	05/23	1000	1000	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 Liddick	09/01	0740	210039	10/23	7.0	23.1	7.01	-25.4	P/F	L/F
Calibr.	I	I	0742	2104A60	03/23	4.0	23.0	4.00	152.4	P/F	L/F
Calibr.	I	I	0744	2012C64	06/22	10.0	23.2	10.01	-177.3	P/F	L/F
ICV			0746	2012C64	06/22	10.0	23.2	10.00	-198.9	P/F	L/F
CCV			1646	2104A60	03/23	4.0	22.5	4.06	151.3	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 -173.8 , slope from 4 to 7 177.8 (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: 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	0748	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:

2021-09-06-48
CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)
 2021-07-19-34

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

Meter ID:

Arya

RQ:

2021-07-09-34

Project:

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 07/22/21

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	9/13/21	8:13	22.3	758.1	8.7	8.6	99.8		1.07	P/F	L/F
ICV	Charlie Hoey	9/13/21	8:15	22.4	758.1	8.7	8.6	99.9		1.07	P/F	L/F
CCV	Charlie Hoey	9/13/21	14:24	27.6	756.6	7.8	7.9	100.8		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.	Charlie Hoey	9/13/21	8:17	1108 F51	8/23	1000	1620	P/F	L/F
ICV	Charlie Hoey	9/13/21	8:19	1102792	1/23	100	98.7	P/F	L/F
CCV	Charlie Hoey	9/13/21	14:27	2009A62	8/22	50000	49100	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	9/13/21	8:22	210039	10/23	7.0	22.3	7.04	-25.9	P/F	L/F
Calibr.	Charlie Hoey	9/13/21	8:26	2104A60	3/23	4.0	22.1	4.01	151.9	P/F	L/F
Calibr.	Charlie Hoey	9/13/21	8:29	2012C64	6/22	10.0	22.2	9.99	-199.3	P/F	L/F
ICV	Charlie Hoey	9/13/21	8:32	2012C64	6/22	10.0	22.2	10.02	-199.6	P/F	L/F
CCV	Charlie Hoey	9/13/21	14:30	2104A60	3/23	4.0	22.7	4.00	148.3	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 +173.4, slope from 4 to 7 +177.8 (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: 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	Charlie Hoey	9/13/21	8:34	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: Anya

RQ: 2021-09-06-47

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 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 L. 22.1	07/14/21	1000	21.8	756	8.7	8.74	99.7	—	1.06	Ⓟ/F	Ⓟ/F
ICV	11	11	1004	21.8	756	8.7	8.77	99.7	—	1.06	Ⓟ/F	Ⓟ/F
CCV	Drew L. 22.1	11	16.10	22.5	756	8.6	8.51	99.14	—	—	Ⓟ/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 L. 22.1	07/14/21	1006	1108F51	08/23	1000	1000	Ⓟ/F	Ⓟ/F
ICV	11	11	1008	1102792	01/23	100	99.7	Ⓟ/F	Ⓟ/F
CCV	Drew L. 22.1	11	1618	2009A62	08/22	50K	51231	Ⓟ/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.	Drew L. 22.1	07/14/21	1010	210039	10/23	7.0	22.3	7.01	-27.7	Ⓟ/F	Ⓟ/F
Calibr.	1	1	1012	2104A40	03/23	4.0	22.1	4.01	147.8	Ⓟ/F	Ⓟ/F
Calibr.	1	1	1014	2012C64	06/22	10.0	22.3	10.01	-200.9	Ⓟ/F	Ⓟ/F
ICV	1	1	1016	2012C64	06/22	10.0	22.3	10.01	-200.7	Ⓟ/F	Ⓟ/F
CCV	Drew L. 22.1	11	1620	2104A60	03/23	4.0	22.3	4.03	149.7	Ⓟ/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 -173.2, slope from 4 to 7 177.7 (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 L. 22.1	07/14/21	1018	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: Arya

RQ: 2021-09-13-56

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 07/22/21

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	9/21/21	8:15	23.5	755.2	8.5	8.5	99.7	—	1.05	P	F
ICV	"	"	8:18	23.5	755.1	8.5	8.5	99.6	—	1.05	P	F
CCV	Charlie Hoey	9/21/21	14:18	23.1	755.5	8.5	8.5	99.7	—	1.05	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- μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	9/21/21	8:20	1108F51	8/23	1000	988	P/F	L/F
ICV	"	"	8:22	1102792	1/23	100	99.4	P/F	L/F
CCV	Charlie Hoey	9/21/21	14:21	2009A102	8/22	50000	49104	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	9/21/21	8:25	210039	10/23	7.0	23.0	7.05	-28.2	P/F	L/F
Calibr.	"	"	8:28	2107E46	7/23	4.0	22.8	4.01	-149.1	P/F	L/F
Calibr.	"	"	8:31	2012C64	6/22	10.0	22.9	10.00	-200.5	P/F	L/F
ICV	"	"	8:33	2012C64	6/22	10.0	22.9	9.99	-201.0	P/F	L/F
CCV	Charlie Hoey	9/21/21	14:24	2107E46	7/23	4.0	22.9	4.08	-143.9	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 -172.3, 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: 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	Charlie Hoey	9/21/21	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:

Arya

RQ:

2021-07-05-05

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.	Andrew Luering	9/22/21	747	22.6	754	8.6	8.56	99.4	-	1.06	⓪/F	⓪/F
ICV	"	"	750	22.8	754	8.5	8.55	99.2	-	1.06	⓪/F	⓪/F
CCV	"	"	1450	25.3	752	8.1	8.12	99.0	-	1.06	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	9/22/21	756	1108FS1	8/2023	1000	1009	⓪/F	⓪/F
ICV	"	"	759	1102792	1/2023	100	99.0	⓪/F	⓪/F
CCV	"	"	1454	1105551	5/2023	50,000	49,746	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	9/22/21	801	210039	10/2023	7.0	22.9	7.05	-29.3	⓪/F	⓪/F
Calibr.	"	"	804	2107E46	7/2023	4.0	22.8	4.01	149.5	⓪/F	⓪/F
Calibr.	"	"	807	2012C64	6/2022	10.0	23.0	10.01	-201.9	⓪/F	⓪/F
ICV	"	"	809	2012C64	6/2022	10.0	23.0	9.98	-202.1	⓪/F	⓪/F
CCV	"	"	1457	2107E46	7/2023	4.0	23.0	3.97	151.2	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 -172.6 , 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: 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	Andrew Luering	9/22/21	811	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: ANV1

RQ

2021-09-27-39

Project

HAD / 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.	Andrew Luering	9/27/21	722	22.6	757	8.6	8.58	99.5%	-	1.06	0/F	0/F
ICV	"	"	"	724	22.8	757	8.6	8.57	99.6%	-	1.06	0/F
CCV	"	"	"	1541	27.1	755	7.9	7.92	99.5%	-	1.06	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Luering	9/27/21	727	1108FS	8/2023	1000	1004	0/F	0/F
ICV	"	"	"	730	1102792	100	101.0	0/F	0/F
CCV	"	"	"	1543	1105C52	5000	49.55	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	9/27/21	731	210039	10/2023	7.0	23.6	7.08	-31.6	0/F	0/F
Calibr.	"	"	"	734	2107E46	7/2023	4.0	23.5	4.03	148.3	0/F
Calibr.	"	"	"	737	2012C64	6/2022	10.0	23.7	10.01	-204.1	0/F
ICV	"	"	"	739	2012C64	6/2022	10.0	23.7	9.98	-204.2	0/F
CCV	"	"	"	1544	2107E46	7/2023	4.0	23.6	3.99	148.1	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 2172.5, 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: 7/22/21

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	Andrew Luering	9/27/21	734	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: Arya

RQ: 2021-09-27-41

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 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	9/28/21	10:00	23.1	756.0	8.5	8.5	99.5	-	1.06	P F L	F
ICV	"	"	10:02	23.2	756.0	8.5	8.5	99.5	-	1.06	P F L	F
CCV	Charlie Hoey	9/28/21	1411	30.5	754.5	7.45	7.45	99.5	-	1.06	P F L	F
CCV						7.5					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	9/28/21	10:06	1108F51	8/23	1000	1000	P F L	F
ICV	"	"	10:08	1102792	1/23	100	100.3	P F L	F
CCV	Charlie Hoey	9/28/21	1414	1108F51	8/23	1000	993	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	9/28/21	10:11	210039	10/23	7.0	23.3	7.0	-31.5	P F L	F
Calibr.	"	"	10:14	2107E46	7/23	4.0	23.2	4.0	148.0	P F L	F
Calibr.	"	"	10:17	2012C64	6/22	10.0	23.4	10.0	-204.1	P F L	F
ICV	"	"	10:19	2012C64	6/22	10.0	23.5	9.98	-204.0	P F L	F
CCV	Charlie Hoey	9/28/21	1416	2107E46	7/23	4.0	23.8	3.86	155.0	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 -172.0, slope from 4 to 7 -179.5 (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: 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 GT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Charlie Hoey	9/28/21	10:21	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:

RQ-2021-10-04-31

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 10)

SEST2110

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

Meter ID:

Arya

RQ-

2021-10-11-1060

RQ-

2021-10-11-29

Project:

HABISMPITrend

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.	Charlie Hoey	10/12/21	813	23.1	754.0	8.5	8.49	99.2	-	1.06	P / F	L / F
ICV	"	"	815	23.8	754.0	8.4	8.39	99.2	-	1.06	P / F	L / F
CCV	Charlie Hoey	10/12/21	1558	23.3	752.5	8.4	8.51	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. ET 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	10/12/21	818	1108F51	8/23	1000	1000	P / F	L / F
ICV	"	"	820	1102792	1/23	100	98.2	P / F	L / F
CCV	Charlie Hoey	10/12/21	1601	1105C52	5/23	5000	4851	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.	Charlie Hoey	10/12/21	825	210039	10/23	7.0	23.5	7.0	-34.4	P / F	L / F
Calibr.	"	"	827	2107E46	7/23	4.0	23.4	4.0	144.4	P / F	L / F
Calibr.	"	"	829	2012C64	6/22	10.0	23.6	10.0	-206.6	P / F	L / F
ICV	"	"	832	2012C64	6/22	10.0	23.6	9.98	-206.5	P / F	L / F
CCV	Charlie Hoey	10/12/21	1605	2107E46	7/23	4.0	23.2	3.98	144.2	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 $+172.2$, 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: 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	Charlie Hoey	10/12/21	834	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:

RQ-2021-10-04-31

SEST2110

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:

Arya

RQ:

2021-10-18-03
2021-10-25-08

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 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	10/25/21	817	23.1	754.0	8.5	8.47	99.2	—	1.07	P / F	L / F
ICV	"	"	821	23.1	754.1	8.5	8.60	100.7	—	1.07	P / F	L / F
CCV	Charlie Hoey	10/25/21	1309	22.2	753.3	8.6	8.77	100.7	—	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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	10/25/21	824	1108F51	8/23	1000	1000	P / F	L / F
ICV	"	"	826	1102792	1/23	100	98.1	P / F	L / F
CCV	Charlie Hoey	10/25/21	1313	1105C52	5/23	5000	4888	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	10/25/21	828	210039	10/23	7.00	23.4	7.00	-31.4	P / F	L / F
Calibr.	"	"	832	2107E46	7/23	4.00	23.3	4.00	146.4	P / F	L / F
Calibr.	"	"	834	2012C64	6/22	10.00	23.5	10.00	-204.6	P / F	L / F
ICV	"	"	836	2012C64	6/22	10.00	23.5	9.98	-204.8	P / F	L / F
CCV	Charlie Hoey	10/25/21	1315	2107E46	7/23	4.00	23.3	4.07	141.6	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 10 173.2, slope from 4 to 7 177.8 (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: 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	10/25/21	839	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: Acva

RQ: 2021-10-25-67

Project: SCI-Training

- 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.	Andrew Luering	10/26/21	720	22.9	752	8.5	8.51	99.0	✓	1.07	(P) F	(U) F
ICV	"	"	721	22.9	752	8.5	8.51	99.1	✓	1.07	(P) F	(U) F
CCV	S. Fischer	10/26/21	1520	26.8	750	7.9	7.91	98.8	✓	1.07	(P) F	(U) 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	10/26/21	722	1108FS1	8/2023	1000	1000	(P) F	(U) F
ICV	"	"	725	1102792	1/2023	100	98.0	(P) F	(U) F
CCV	S. Fischer	10/26/21	1522	1108FS1	08/23	1000	1001	(P) F	(U) 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	10/26/21	727	210039	10/2023	7.0	23.2	7.01	-32.9	(P) F	(U) F
Calibr.	"	"	729	2107E46	7/2023	4.0	23.1	4.00	146.5	(P) F	(U) F
Calibr.	"	"	731	2012C64	6/2022	10.0	23.2	10.02	-205.4	(P) F	(U) F
ICV	"	"	731	2012C64	6/2022	10.0	23.3	10.00	-205.6	(P) F	(U) F
CCV	S. Fischer	10/26/21	1524	2107E46	07/23	4.	23.2	4.02	143.7	(P) F	(U) 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 10 172.5, slope from 4 to 7 179.4 (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	Andrew Luering	10/26/21	735	0.00	0.00	(P) F	(U) 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:

Anya

RQ:

2021-11-15-53

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

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 Liddick	11/17/21	0832	22.6	760	8.6	8.64	100.1	—	1.06	P/F	F
ICV			0836	22.6	760	8.6	8.64	100.0	—	1.06	P/F	F
CCV	Jordan Skaggs	11/17/21	1700	24.7		8.3	8.4	100.0			P/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	11/17/21	0838	1108FS1	08/23	1000	1000	P/F	F
ICV			0840	1102792	01/23	100	99.3	P/F	F
CCV	Jordan Skaggs	1700	1700	1108FS1	08/23	1000	1005	P/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.	Drew Liddick	11/17/21	0842	210039	10/23	7.0	22.6	7.01	-34.9	P/F	F
Calibr.			0844	2107E46	05/23	4.0	22.5	4.00	143.9	P/F	F
Calibr.			0846	1106829	11/22	10.0	22.8	10.00	-208.3	P/F	F
ICV			0848	1106829	11/22	10.0	22.8	9.99	-208.5	P/F	F
CCV	Jordan Skaggs	11/17/21	1700	7107E3	7/20/23	4.0	24.7	3.99	142.4	P/F	F
CCV				2107 E46						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 -178.8 , 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: 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 Liddick	0850	0850	0.00	0.00	P/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: Arva

RQ: 2021-11-15-52

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 BEP SOP FT 1500	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.	Andrew Luerling	11/30/21	755	18.8	758	9.3	9.26	99.8	—	1.06	P/F	L/F
ICV	"	"	758	14.1	758	9.2	9.23	99.8	—	1.06	P/F	L/F
CCV	Charlie Hoyer	11/30/21	1542	21.8	757.8	8.8	8.73	99.5	—	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Andrew Luerling	11/30/21	800	1108FS1	8/2023	1000	1000	P/F	L/F
ICV	"	"	802	1105C57	5/2023	100	99.7	P/F	L/F
CCV	Charlie Hoyer	11/30/21	1545	1105C52	5/23	5006	4802	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1000	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Andrew Luerling	11/30/21	804	213013	4/2023	7.0	21.8	7.02	-37.4	P/F	L/F
Calibr.	"	"	806	2107E46	7/2023	4.0	21.7	4.06	141.6	P/F	L/F
Calibr.	"	"	808	1106829	11/2022	10.0	21.8	10.04	-209.7	P/F	L/F
ICV	"	"	810	1106829	11/2022	10.0	21.8	10.02	-210.2	P/F	L/F
CCV	Charlie Hoyer	11/30/21	1547	2107E46	7/23	4.0	21.9	3.95	144.5	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 10 172.3, 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 CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Andrew Luerling	11/30/21	812	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: Arya

RQ:

Project: 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 10/19/2021

DO DEP SOP FT 1500	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.	Charlie Hoey	12/1/21	826	21.1	760.0	8.9	8.90	100.0	—	1.00	P/F	L/F
ICV	"	"	828	19.8	760.0	9.1	9.12	100.0	—	1.00	P/F	L/F
CCV	Charlie Hoey	12/1/21	1526	21.7	757.8	8.8	8.79	100.0	—	1.00	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	12/1/21	830	1108F51	8/23	1000	1000	P/F	L/F
ICV	"	"	832	1105C57	5/23	100	98.2	P/F	L/F
CCV	Charlie Hoey	12/1/21	1523	1108F51	8/23	1000	1005	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	12/1/21	835	213013	4/23	7.01	21.7	7.01	-39.1	P/F	L/F
Calibr.	"	"	838	2107E46	7/23	4.00	21.7	4.00	140.2	P/F	L/F
Calibr.	"	"	841	1106829	11/22	10.04	21.8	10.04	-209.7	P/F	L/F
ICV	"	"	844	1106829	11/22	10.04	21.8	10.01	-210.0	P/F	L/F
CCV	Charlie Hoey	12/1/21	1525	2107E46	7/23	4.00	22.0	4.05	136.1	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 10 170, slope from 4 to 7 179.3 (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: 10/19/2021

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	846	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:

Amya

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

10/19/2021

DO BEP 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 Lizzard	12/22/21	0920	20.2	759	9.0	9.03	99.8	—	1.06	P/F	L/F
ICV	//	//	0924	20.3	759	9.0	9.03	99.8	—	1.06	P/F	L/F
CCV	//	//	1430	20.2	759	9.0	8.99	99.7	—	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Drew Lizzard	12/22/21	0926	1108F51	08/23	1000	1000	P/F	L/F
ICV	//	//	0928	1105C57	05/23	100	99.2	P/F	L/F
CCV	//	//	1134	1107644	06/23	100k	99.98	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.	Drew Lizzard	12/22/21	0930	213013	04/23	7.0	22.4	7.01	-37.7	P/F	L/F
Calibr.			0934	2107E46	07/23	4.0	22.3	4.00	1409	P/F	L/F
Calibr.			0936	1106829	11/22	10.0	22.3	10.00	-210.3	P/F	L/F
ICV			0940	1106829	11/22	10.0	22.3	9.99	-210.5	P/F	L/F
CCV			1435	2107E46	07/23	4.0	22.3	4.01	143.1	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 -172.6 , 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: 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	Drew Lizzard	12/22/21	0942	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:

Arya

RQ:

Project:

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

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	12/6/21	751	21.3	757.0	8.8	8.81	99.7	-	1.00	P F L	F
ICV	"	"	754	21.5	757.7	8.8	8.80	99.8	-	1.00	P F L	F
CCV	Charlie Hoey	12/6/21	1446	23.0	756.0	8.4	8.40	99.7	-	1.00	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	12/6/21	756	1108F51	8/23	1000	1000	P F L	F
ICV	"	"	758	1105C57	5/23	100	99.3	P F L	F
CCV	Charlie Hoey	12/6/21	1449	1108F51	8/23	1000	974	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	12/6/21	802	213013	4/23	7.00	22.1	7.00	-39.9	P F L	F
Calibr.	"	"	805	2107E40	7/23	4.00	22.2	4.00	137.0	P F L	F
Calibr.	"	"	808	1106829	11/22	10.03	22.4	10.03	-212.0	P F L	F
ICV	"	"	810	1106829	11/22	10.03	22.4	10.01	-212.1	P F L	F
CCV	Charlie Hoey	12/6/21	1453	2107E40	7/23	4.00	22.1	3.95	139.4	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 10 172.1, 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: 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	12/6/21	812	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:

Trend readings / no samples to lab

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:

Anya

RQ:

Project:

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

10/19/21

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	DO Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	S. Fischer	12/6/21	1600	22.4	755	8.6	8.63	99.4	✓	1.07	P/F	L/F
ICV	S. Fischer	12/6/21	1602	22.5	755	8.6	8.63	99.6	✓	1.07	P/F	L/F
CCV	Charlie Hoey	12/17/21	1627	23.7	756.3	8.4	8.47	100.2	—	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 umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	S. Fischer	12/6/21	1604	1108FS1	08/23	1000	1000	P/F	L/F
ICV	"	"	1606	1105CS7	05/23	100	99.3	P/F	L/F
CCV	Charlie Hoey	12/17/21	1629	1108FS1	8/23	1000	988	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.	S. Fischer	12/6/21	1608	213013	04/23	7.	22.7	7.01	-43.5	P/F	L/F
Calibr.	"	"	1610	2107E46	07/23	4.	22.7	4.00	138.1	P/F	L/F
Calibr.	"	"	1612	1106829	11/22	10.	22.7	10.03	-213.6	P/F	L/F
ICV	"	"	1614	1106829	11/22	10.	22.7	9.99	-213.7	P/F	L/F
CCV	Charlie Hoey	12/17/21		2107E46	7/23	4.00	22.5	3.84	147.6	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 10 170.1, slope from 4 to 7 181.6 (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: 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	S. Fischer	12/6/21	1614	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:

Arya

RQ:

2021-11-29-35

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	DO Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	12/18/21	847	19.8	756.9	9.1	9.08	99.6	—	1.07	P/F	L/F
ICV	"	"	849	20.2	756.9	9.0	9.05	100.0	—	1.07	P/F	L/F
CCV	S. Fischer	"	1600	23.2	754	8.5	8.51	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Charlie Hoey	12/18/21	851	1108F51	8/23	1000	1000	P/F	L/F
ICV	"	"	856	1105C57	5/23	100	99.1	P/F	L/F
CCV	S. Fischer	"	1602	1108F51	08/23	1000	1022	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	12/18/21	858	213013	4/23	7.01	22.2	7.01	-39.9	P/F	L/F
Calibr.	"	"	900	2107E46	7/23	4.00	22.1	4.00	139.4	P/F	L/F
Calibr.	"	"	905	1106829	11/22	10.03	22.1	10.03	-211.8	P/F	L/F
ICV	"	"	907	1106829	11/22	10.03	22.2	10.01	-212.0	P/F	L/F
CCV	S. Fischer	"	1604	2107E46	07/23	4.	22.7	3.91	143.2	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 10 171.9, slope from 4 to 7 179.3 (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: 10/19/2021

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	12/18/21	909	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: