

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

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

Meter Quanta RQ- 2017-06-19-70 Project VEC South

- Notes:** (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site _____

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification 5/31/2017

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	<u>AKalmbacher</u>	<u>6-20-17</u>	<u>0845</u>	<u>23.2</u>	<u>8.54</u>	<u>8.54</u>	<u>100</u>	<u>N/A</u>	<u>N/A</u>		
ICV		<u>↓</u>	<u>0915</u>	<u>23.3</u>	<u>8.53</u>	<u>8.52</u>	<u>99</u>	<u>N/A</u>	<u>N/A</u>	<u>P</u>	<u>L</u>
CCV	<u>AKalmbacher</u>	<u>↓</u>	<u>1520</u>	<u>24.4</u>	<u>8.35</u>	<u>8.23</u>	<u>98.5</u>	<u>N/A</u>	<u>N/A</u>	<u>P</u>	<u>L</u>
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	<u>AKalmbacher</u>	<u>6-20-17</u>	<u>0850</u>	<u>170315A</u>	<u>3/2018</u>	<u>100</u>	<u>99</u>		
ICV		<u>↓</u>		<u>170315B</u>	<u>3/2018</u>	<u>1,000</u>	<u>979</u>	<u>P</u>	<u>L</u>
CCV	<u>AKalmbacher</u>	<u>↓</u>	<u>1525</u>	<u>170315B</u>	<u>3/2018</u>	<u>1,000</u>	<u>969</u>	<u>P</u>	<u>L</u>
CCV									

Report specific conductance as a whole number with no decimal figure.

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	<u>AKalmbacher</u>	<u>6-20-17</u>	<u>0910</u>	<u>2702C47</u>	<u>2/2019</u>	<u>7.0</u>	<u>6.99</u>	<u>N/A</u>		
Calibr.			<u>0913</u>	<u>2610F42</u>	<u>10/2018</u>	<u>4.0</u>	<u>4.00</u>	<u>N/A</u>		
Calibr.				<u>2611998</u>	<u>5/2018</u>	<u>10.0</u>	<u>AK</u>			
ICV				<u>2702C47</u>	<u>2/2019</u>	<u>AK</u>				
CCV				<u>2611998</u>	<u>5/2018</u>	<u>10</u>	<u>9.81</u>		<u>P</u>	<u>L</u>
CCV	<u>AKalmbacher</u>	<u>↓</u>	<u>1530</u>	<u>2702C47</u>		<u>7.0</u>	<u>7.12</u>		<u>P</u>	<u>L</u>

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50;

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

mV pH 10 Range -180 $\pm$ 50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification N/A

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

NK 6/26/12

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

Boldly "X" this box if there is qualified data on this name.

Meter YSI #3 RQ- 2017-06-19-16 Project Interlachen #2

- Notes:** (1) Numbers ≤ 4 , are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
 (2) Always wait for meter to stabilize before recording any readings.
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site Lab

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 06-2017

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	P. O'Connor	06-20-17	0710	23.4	8.53	8.52	100.0	59.4	0.91036	Pass	Lab
ICV	↓	↓	0720	23.3	8.53	8.52	100.0	59.4	0.91036	Pass	Lab
CCV	B. P.	6/20/17	1405	24.8	8.29	8.54	102.9	59.4	0.91036	P	L
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	P. O'Connor	06-20-17	0722	170315B	03-2018	1000	1000	Pass	Lab
ICV	↓	↓	0725	170315A	03-2018	100	102	Pass	Lab
CCV	B. P.	6/20/17	1406	170315B	3/18	1000	1001	P	L
CCV									

Report specific conductance as a whole number with no decimal figure.

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	P. O'Connor	06-20-17	0729	2702C47	02-2019	7.0	7.08	-20.5	Pass	Lab
Calibr.	↓	↓	0731	2610F42	10-2018	4.0	4.00	-	Pass	Lab
Calibr.	↓	↓	0735	2611998	05-2018	10.0	9.97	-172.9	Pass	Lab
ICV	↓	↓	0740	2702C47	02-2019	7.0	7.08	-22.0	Pass	Lab
CCV	B. P.	6/20/17	1411	2610F42	10/18	7.0	3.94	141.7	P	L
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50;

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

mV pH 10 Range -180 $\pm$ 50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly)

Date of Last Depth Verification 06-2018

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater

NF 6/20/17