

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 VSI # 3

RQ- 2016-06-27-21

Project Gray's Vest

- 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 L 6

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 4/1/2016

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>B. Davis</u>	<u>6/28/16</u>	<u>747</u>	<u>23.7</u>	<u>8.46</u>	<u>8.46</u>	<u>100</u>	<u>✓</u>	<u>✓</u>	<u>P</u>	<u>L</u>
ICV	<u>↓</u>	<u>6/28/16</u>	<u>748</u>	<u>23.7</u>	<u>8.46</u>	<u>8.45</u>	<u>99.8</u>	<u>48.2</u>	<u>1.023</u>	<u>P</u>	<u>L</u>
CCV	<u>↓</u>	<u>↓</u>	<u>1256</u>	<u>24.5</u>	<u>8.34</u>	<u>8.35</u>	<u>100.3</u>	<u>49.2</u>	<u>1.023</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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	<u>B. Davis</u>	<u>6/28/16</u>	<u>853</u>	<u>160216A</u>	<u>2/17</u>	<u>1000</u>	<u>1005</u>	<u>P</u>	<u>L</u>
ICV	<u>↓</u>	<u>↓</u>	<u>1256</u>	<u>160216B</u>	<u>8/16</u>	<u>100</u>	<u>104</u>	<u>P</u>	<u>L</u>
CCV	<u>↓</u>	<u>↓</u>	<u>1302</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.						7.0				
Calibr.						4.0				
Calibr.						10.0				
ICV	<u>B. Davis</u>	<u>6/28/16</u>	<u>855</u>	<u>2509F14</u>	<u>9/17</u>	<u>4.0</u>	<u>4.07</u>	<u>166.6</u>	<u>P</u>	<u>L</u>
CCV	<u>↓</u>	<u>↓</u>	<u>1304</u>	<u>2510A81</u>	<u>8/17</u>	<u>7.0</u>	<u>7.05</u>	<u>-10.5</u>	<u>P</u>	<u>L</u>
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU;

mV pH7 Range 0 ± 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 180mV

Depth (Quarterly)

Date of Last Depth Verification 4/1/16

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

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

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Meter YSI 556 #1 RQ- 2016-06-27-43 Project Deep Gr. SCI

- 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

1/2016 04/2016

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	PO Comm	06/28/16	0700	23.5	8.49	8.5	100.0	—	—	Pass	LAS
ICV	↓	↓	0715	23.5	8.49	8.49	99.9	—	—	Pass	LAS
CCV	J Pann	6/28/16	1145	23.6	8.48	8.52	100.5	—	—	Pass	Lob
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.	PO Comm	06/28/16	0717	160216A	02/2017	1000	1000	Pass	LAS
ICV	↓	↓	0718	↓	↓	↓	1002	Pass	LAS
CCV	J Pann	6/28/16	1146	160216B	8/2016	100	97	Pass	Lob
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.	PO Comm	06/28/16	0720	2510A81	10/2017	7.0	7.00	-40.1	Pass	LAS
Calibr.	↓	↓	0750	2509F74	09/2017	4.0	4.00	119	Pass	LAS
Calibr.	↓	↓	0800	2510A88	04/2017	10.0	9.96	-197	Pass	LAS
ICV	↓	↓	0805	2510A81	10/2017	7.0	7.12	-41.7	Pass	LAS
CCV	J Pann	6/28/16	1148	2510A86	4/17	10.0	10.02	19.8	Pass	Lob
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU;

mV pH7 Range 0 ± 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