Conductivity Calibration Certificate

RBRlegato³ C.T.D, Teledyne Webb Slocum, 1000dbar, dry bay s/n: 203788

References: Autosal8400B#66289, MS-315#15506, SSW P162, RC#002

Reference Resistance (ohm)	Reference Conductivity (mS/cm)	Voltage Ratio, V	Measured Conductivity (mS/cm)	Calibration Error (mS/cm)
open	0.0000	-0.000233	-0.0005	-0.0005
694.042	7.4450	0.038996	7.4449	-0.0001
331.938	15.5665	0.081790	15.5667	0.0002
150.026	34.4415	0.181247	34.4428	0.0013
100.022	51.6599	0.271958	51.6591	-0.0008
75.029	68.8683	0.362633	68.8683	-0.0001
55.528	93.0544	0.490068	93.0544	-0.0000

Bath	Voltage Ratio	Temperature (ITS-90)	Salinity (PSS-78)	Conductivity (mS/cm)
T15S35	0.2258506	14.99081	34.9997	42.9082
T25S35	0.2770046	24.56414	35.0018	52.6187

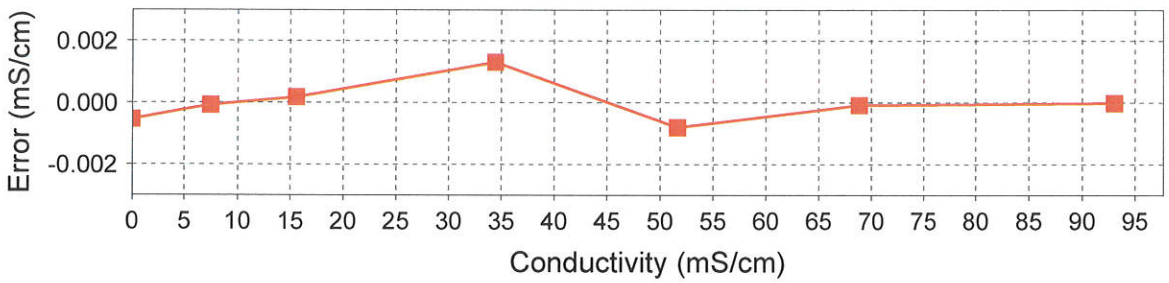
Cell Constant @T15S35 = 5.16712 1/cm

Coefficients

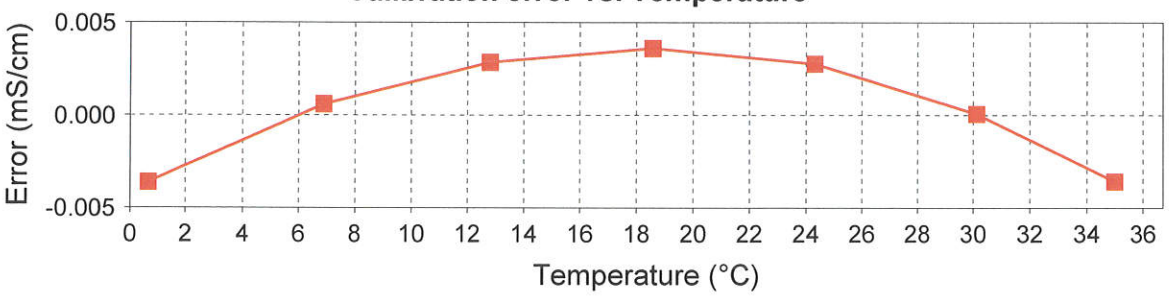
C0:	43.729972E-3
C1:	189.79121
C2:	1.001942
X0:	1.3150086E-3
X1:	-28.782757E-6
X2:	0.0
X3:	0.0
X4:	0.0
X5:	14.990807
X6:	10

$$C_c = \frac{C_0 + C_1 * C_2 * V - X_0 * (T - X_5)}{1 + X_1 * (T - X_5) + X_2 * (P - X_6) + X_3 * (P - X_6)^2 + X_4 * (P - X_6)^3}$$

Calibration error vs. Conductivity



Calibration error vs. Temperature



Calibration Date: 2020-01-06
Issue Date: 2020-01-06
File Name: 203788_20200106_1432C.rsk

Operator: ishkvorets

Approver: kmalorny

Temperature Calibration Certificate

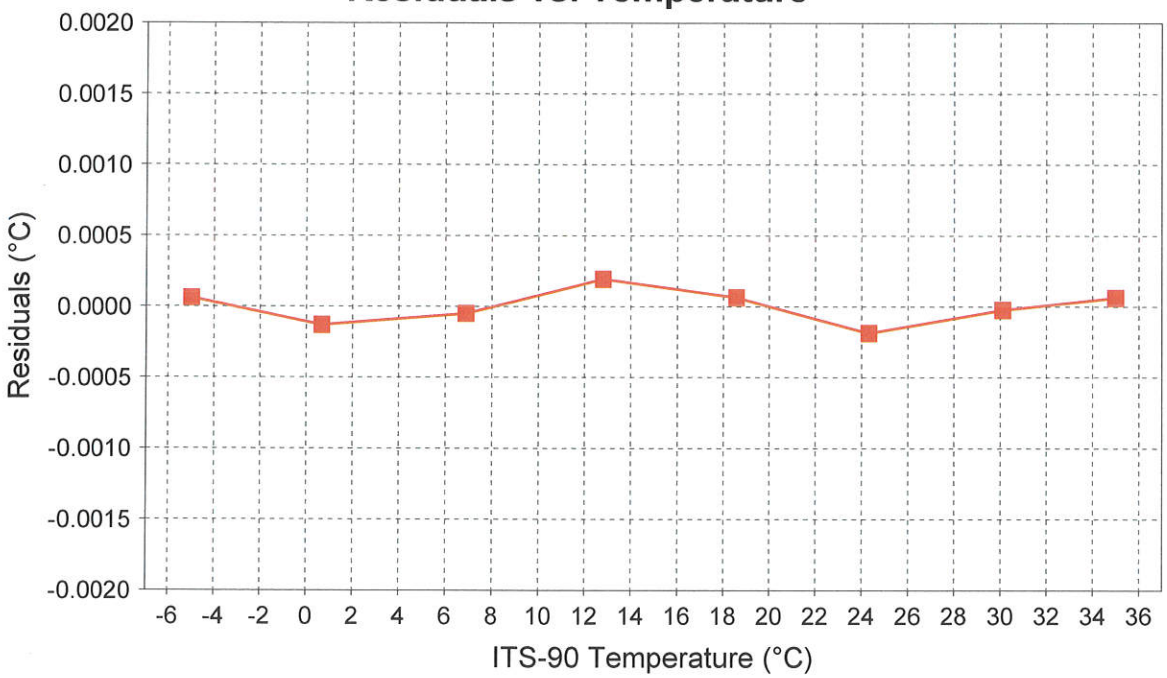
Logger ID: RBRlegato³ Serial No: 203788 Channel No: 2

Reference Temperature, ITS-90	Voltage ratio, V	Measured Temperature, ITS-90	Calibration error
-4.97578	0.745855	-4.97572	0.00006
0.66946	0.684776	0.66933	-0.00013
6.89573	0.612070	6.89568	-0.00005
12.80372	0.540817	12.80391	0.00019
18.57260	0.472032	18.57266	0.00007
24.31756	0.406792	24.31737	-0.00019
30.11242	0.346165	30.11240	-0.00002
34.99857	0.299969	34.99863	0.00006

Coefficients

C0:	3.4559662E-3
C1:	-250.77045E-6
C2:	2.478497E-6
C3:	-74.43651E-9

Residuals vs. Temperature



Calibration Date: 2019-12-19
Issue Date: 2019-12-20
Calibration ID: 37002

Operator: cmazerolle

Approver: kmalorny

Pressure Calibration Certificate

RBRlegato³ C.T.D, Teledyne Webb Slocum, 1000dbar, dry bay s/n: 203788

Sensor rating: 1000 dbar s/n: L063792

Nominal accuracy: 0.05%FS (0.5 dbar)

Reference instrument: Mensor CPC6000 s/n: 612676

Applied pressure, P_{app} (dbar)	Voltage ratio, V	Measured pressure, P_c (dbar)	Calibration error (dbar)
9.953	-0.041521	9.9359	-0.0170
110.000	0.002793	110.0295	0.0295
209.999	0.046852	210.0044	0.0054
309.998	0.090716	309.9807	-0.0173
409.999	0.134403	409.9874	-0.0116
509.999	0.177913	510.0138	0.0148
609.999	0.221222	609.9877	-0.0113
709.998	0.264373	709.9990	0.0010
809.998	0.307354	810.0046	0.0066
909.999	0.350169	910.0061	0.0071
1010.010	0.392824	1010.0028	-0.0072

Coefficients

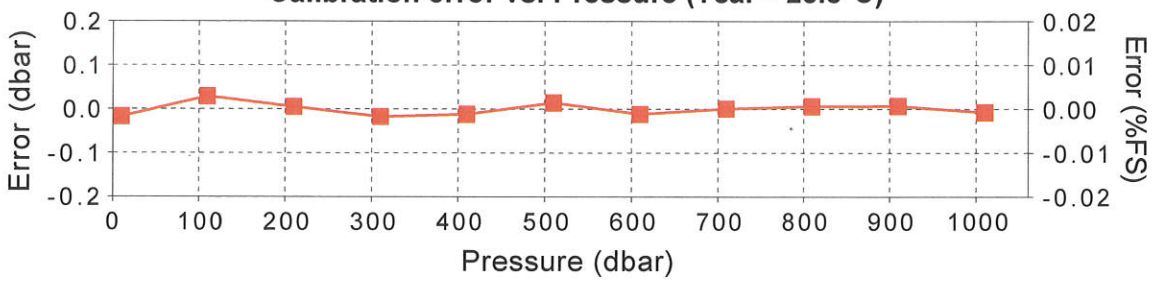
C0:	103.9557
C1:	2.2632927E3
C2:	117.6247
C3:	-15.34485
X0:	9.953
X1:	-211.60254E-3
X2:	-487.58715E-6
X3:	120.38183E-9
X4:	-130.27024E-6
X5:	23.8

$$P_c = X_0 + \frac{P_m - X_0 - X_1(T - X_5) - X_2(T - X_5)^2 - X_3(T - X_5)^3}{1 + X_4(T - X_5)}$$

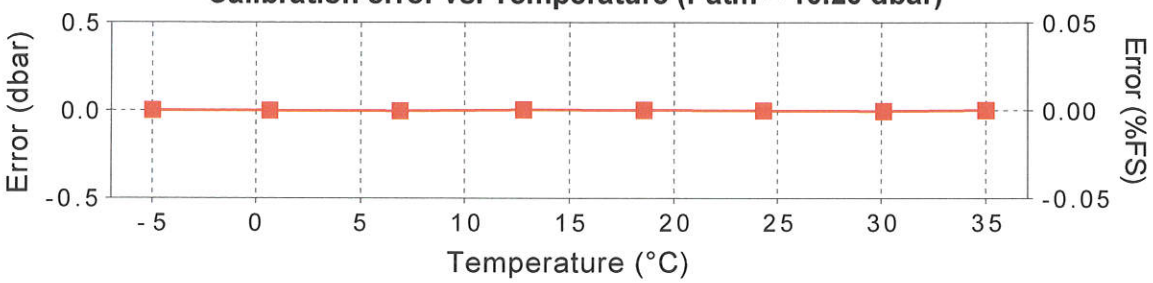
Head (mm) = 248

$$P_m = C_0 + C_1 V + C_2 V^2 + C_3 V^3$$

Calibration error vs. Pressure (Tcal = 23.8°C)



Calibration error vs. Temperature (Patm = 10.20 dbar)



Calibration Date: 2020-01-03
Issue Date: 2020-01-03
File Name: 203788_20200103_1411P.rsk

Operator: afalicki

Approver: kmalorny