



# Conductivity Calibration Certificate

RBRlegato<sup>3</sup> C.T.D, Teledyne Webb Slocum, 1000dbar, dry bay s/n: 203790

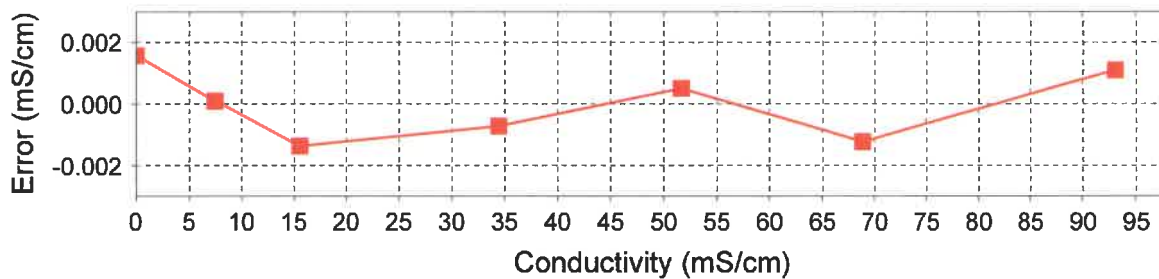
References: Autosal8400B#66289, MS-315#15506, SSW P162, RC#002

Reference Resistance (ohm)	Reference Conductivity (mS/cm)	Voltage Ratio, V	Measured Conductivity (mS/cm)	Calibration Error (mS/cm)	Coefficients	
open	0.0000	-0.000364	0.0016	0.0016	C0:	70.57079E-3
694.038	7.4482	0.038886	7.4483	0.0001	C1:	189.72449
331.935	15.5733	0.081705	15.5719	-0.0014	C2:	1.001942
150.025	34.4564	0.181237	34.4557	-0.0007	X0:	1.3772601E-3
100.021	51.6824	0.272038	51.6829	0.0005	X1:	-27.664046E-6
75.022	68.9041	0.362801	68.9029	-0.0012	X2:	0.0
55.521	93.1057	0.490376	93.1068	0.0011	X3:	0.0
					X4:	0.0
					X5:	15.077937
					X6:	10
Bath	Voltage Ratio	Temperature (ITS-90)	Salinity (PSS-78)	Conductivity (mS/cm)		
T15S35	0.2262721	15.07794	35.0052	42.9999		
T25S35	0.2845660	25.94090	35.0035	54.0610		

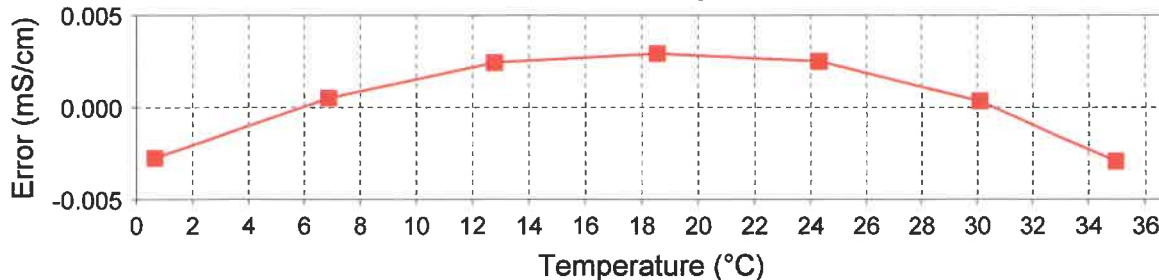
Cell Constant @T15S35 = 5.16932 1/cm

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

Calibration error vs. Conductivity




Calibration error vs. Temperature



Calibration Date: 2020-01-13  
Issue Date: 2020-01-13  
File Name: 203790\_20200113\_1700C.rsk

Operator:   
ishkvorets

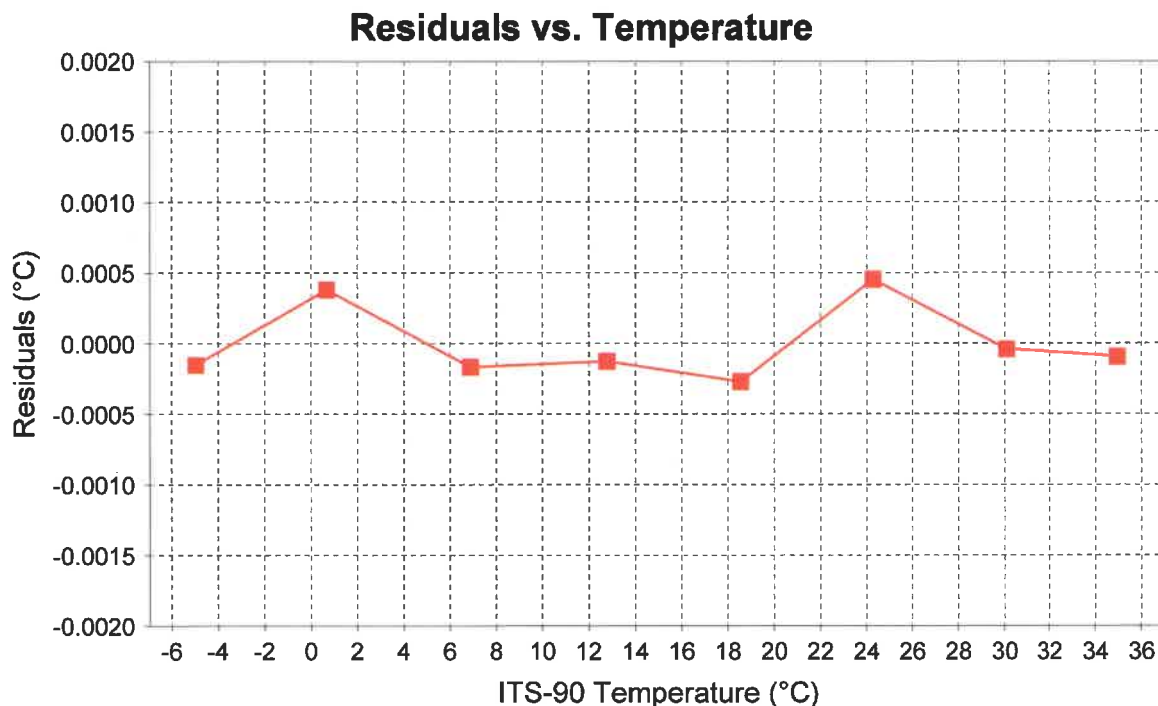
Approver:   
kmalorny



## Temperature Calibration Certificate

Logger ID: RBRlegato<sup>3</sup> Serial No: 203790 Channel No: 2

Reference Temperature, ITS-90	Voltage ratio, V	Measured Temperature, ITS-90	Calibration error	Coefficients	
-4.97624	0.688229	-4.97639	-0.00015	C0:	3.5253693E-3
0.66411	0.621162	0.66449	0.00038	C1:	-255.0673E-6
6.88400	0.544525	6.88383	-0.00017	C2:	2.4688713E-6
12.78938	0.472434	12.78925	-0.00012	C3:	-68.92941E-9
18.55736	0.405460	18.55709	-0.00027		
24.30242	0.344133	24.30288	0.00046		
30.10015	0.288927	30.10011	-0.00004		
34.98953	0.247939	34.98943	-0.00009		



Calibration Date: 2020-01-06  
Issue Date: 2020-01-07  
Calibration ID: 37074

Operator:

  
kmalorny

Approver:

  
kmalorny



## Pressure Calibration Certificate

RBRlegato<sup>3</sup> C.T.D, Teledyne Webb Slocum, 1000dbar, dry bay s/n: 203790

Sensor rating: 1000 dbar s/n: L063794

Nominal accuracy: 0.05%FS (0.5 dbar)

Reference instrument: Mensor CPC6000 s/n: 612676

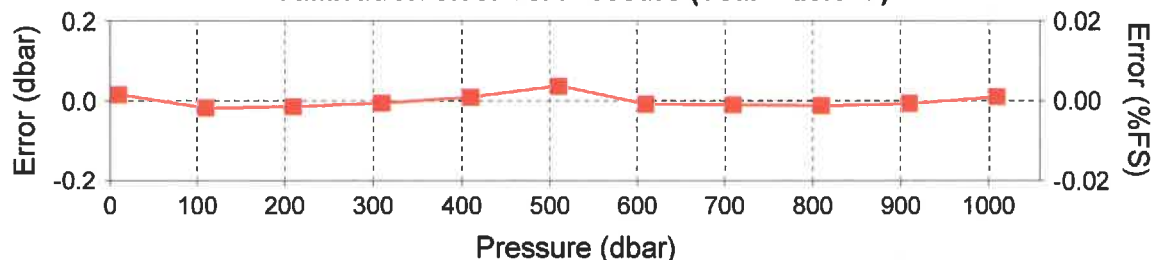
Applied pressure, $P_{app}$ (dbar)	Voltage ratio, V	Measured pressure, $P_c$ (dbar)	Calibration error (dbar)	Coefficients
10.033	-0.042793	10.0490	0.0159	C0: 105.48149
109.999	0.002120	109.9820	-0.0170	C1: 2.2306443E-3
209.999	0.046817	209.9847	-0.0143	C2: 137.59084
309.999	0.091275	309.9937	-0.0053	C3: -10.179821
409.998	0.135501	410.0072	0.0092	X0: 10.0367
509.999	0.179503	510.0353	0.0363	X1: -206.69591E-3
609.998	0.223251	609.9898	-0.0082	X2: -550.7705E-6
709.998	0.266800	709.9886	-0.0094	X3: -1.0190257E-6
809.998	0.310136	809.9863	-0.0117	X4: -86.82161E-6
909.999	0.353269	909.9930	-0.0060	X5: 23.5
1010.020	0.396213	1010.0305	0.0105	

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

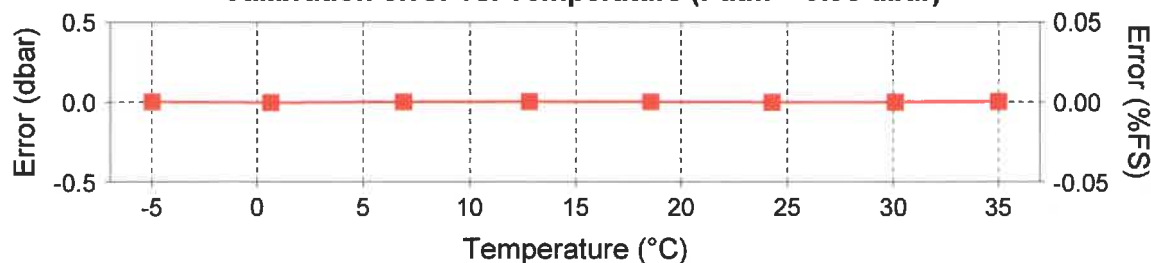
Head (mm) = 228

$$P_m = C_0 + C_1V + C_2V^2 + C_3V^3$$

Calibration error vs. Pressure (Tcal = 23.5°C)



Calibration error vs. Temperature (Patm = 9.98 dbar)



Calibration Date: 2020-01-07

Issue Date: 2020-01-07

File Name: 203790\_20200107\_1437P.rsk

Operator:

kmalorny

Approver:

kmalorny