RBR

Conductivity Calibration Certificate

RBRlegato³ C.T.D, Teledyne Webb Slocum, dry bay (1000dbar)   s/n: 207969
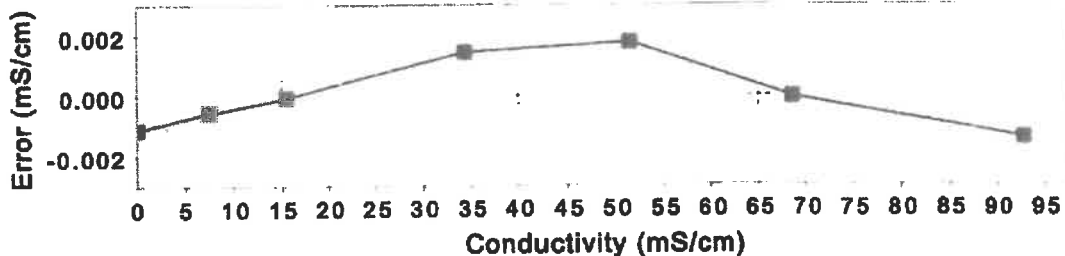**References: Autosal8400B#66289, MS-315#15506, SSW P164, RC#002**

Reference Resistance (ohm)	Reference Conductivity (mS/cm)	Voltage Ratio, V	Measured Conductivity (mS/cm)	Calibration Error (mS/cm)		Coefficients	
open	0.0000	-0.000073	-0.0011	-0.0011	CO:	12.841213E-3	
694.042	7.4240	0.038983	7.4235	-0.0006	C1:	190.10136	
331.926	15.5233	0.081590	15.5233	-0.0000	(K) C2:	1.001942	
150.019	34.3462	0.180613	34.3477	0.0014	X0:	129.42121E-6	
100.016	51.5179	0.270944	51.5197	0.0018	X1:	-8.2977585E-6	
75.023	68.6798	0.361212	68.6798	-0.0001	X2:	0.0	
55.520	92.8068	0.488122	92.8054	-0.0014	X3:	0.0	
					X4:	0.0	

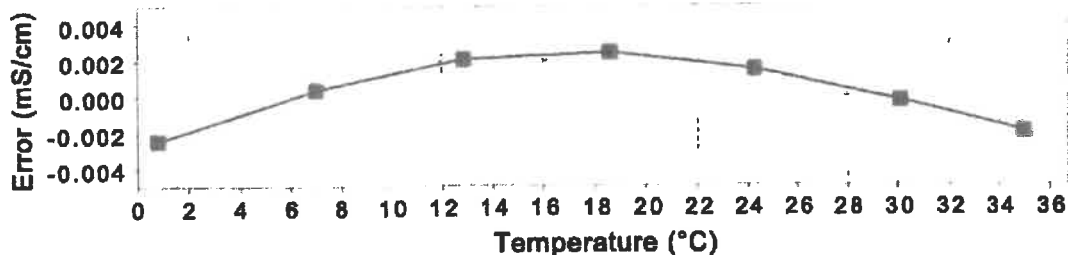| Bath	Voltage Ratio	Temperature (ITS-90)	Salinity (PSS-78)	Conductivity (mS/cm)	X5:	14.877353
T15S35	0.2250136	14.87735	34.9920	42.7882	X6:	10
T25S35	0.2777701	24.76386	34.9969	52.8204		

Cell Constant @T15S35 = 5.15259 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: 2021-08-18
Issue Date: 2021-08-18
File Name: 207969_20210818_1712C.rsk
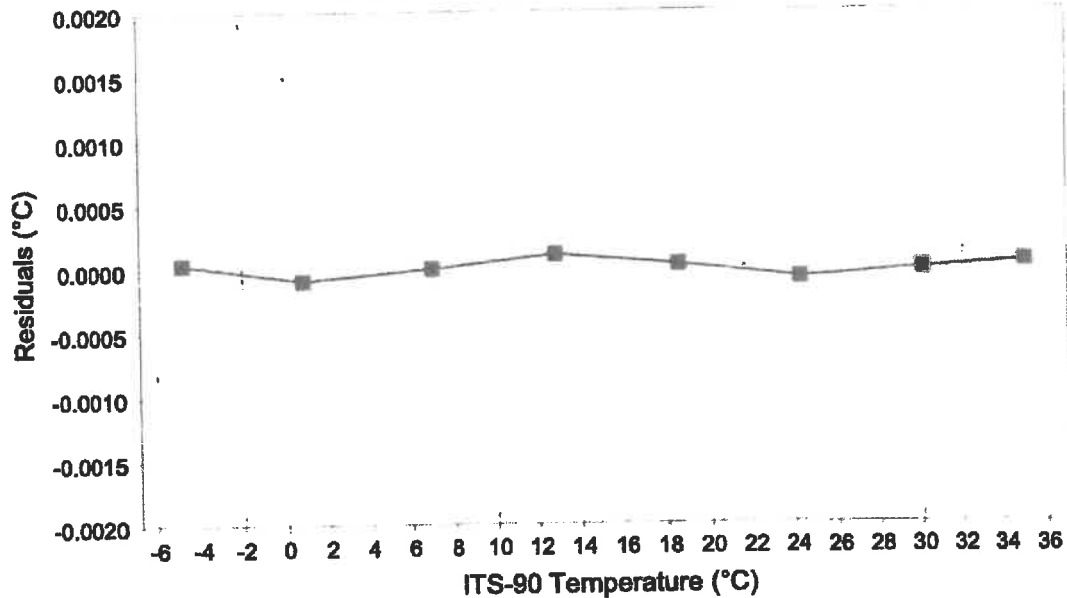
Operator: _jwang_

Approver: _kmalorny_

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Temperature Calibration Certificate

Logger ID: RBRlegato³   Serial No: 207969   Channel No: 2

Reference Temperature, ITS-90	Voltage ratio, V	Measured Temperature, ITS-90	Calibration error		Coefficients
-4.78985	0.690939	-4.78981	0.00004	C0:	3.521882E-3
0.80423	0.624032	0.80414	-0.00009	C1:	-252.00658E-6
6.98883	0.547163	6.98882	-0.00000	C2:	2.5816398E-6
12.86468	0.474640	12.86478	0.00010	C3:	-75.07101E-9
18.60966	0.407082	18.60968	0.00002		
24.33581	0.345129	24.33572	-0.00009		
30.11677	0.289312	30.11676	-0.00002		
34.99245	0.247885	34.99248	0.00004		

Residuals vs. Temperature

Calibration Date: 2021-08-09
Issue Date: 2021-08-10
Calibration ID: 48215

Operator: _dluong_

Approver: _jwang_

RBR

Pressure Calibration Certificate

RBRlegato³ C.T.D, Teledyne Webb Slocum, dry bay (1000dbar)   s/n: 207969
Instrument rating: 1,000 dbar s/n: N009852
Nominal accuracy: 0.05%FS (0.5 dbar)
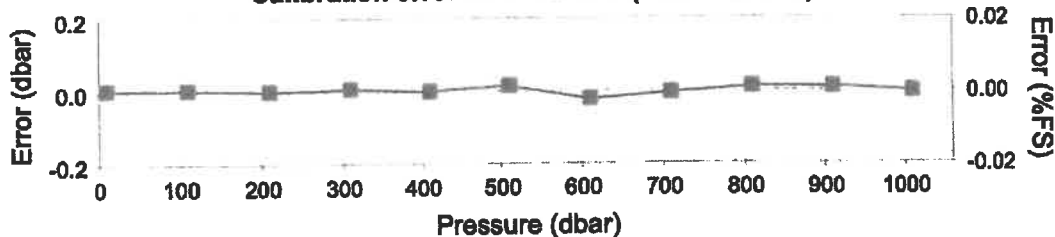**Reference Instrument: Mensor CPC6000 s/n: 612676**

Applied pressure, P_{app} (dbar)	Voltage ratio, V	Measured pressure, P_c (dbar)	Calibration error (dbar)
10.137	0.017519	10.1442	0.0076
110.000	0.059695	110.0066	0.0066
210.000	0.101878	210.0020	0.0020
310.000	0.144023	310.0075	0.0075
410.000	0.186126	410.0001	0.0001
510.000	0.228207	510.0144	0.0144
609.999	0.270241	609.9772	-0.0218
709.998	0.312277	709.9941	-0.0039
809.997	0.354299	810.0081	0.0111
909.998	0.396306	910.0085	0.0105
1010.000	0.438306	1009.9976	-0.0024

Coefficients

C0:	-31.065626
C1:	2.365059E3
C2:	37.59913
C3:	-30.175407
X0:	10.1366
X1:	78.56043E-3
X2:	-12.593171E-6
X3:	-212.69845E-9
X4:	-116.62482E-6
X5:	22.79612

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

$$P_m = C_0 + C_1 V + C_2 V^2 + C_3 V^3$$
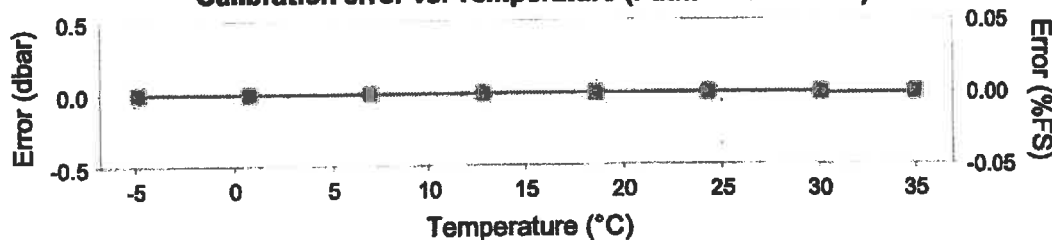
Head (mm) = 242

Calibration error vs. Pressure (Tcal = 22.8°C)

Calibration error vs. Temperature (Patm = 10.07 dbar)

Calibration Date: 2021-08-16
Issue Date: 2021-08-16
File Name: 207969_20210816_1629P.rsk

Operator: _dluong_

Approver: _kmalorny_