

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0225
 CALIBRATION DATE: 04-Feb-08

SBE 39 PRESSURE CALIBRATION DATA
 500 psia S/N 193353

COEFFICIENTS:

PA0 = 7.631577e-001
 PA1 = 2.009369e-002
 PA2 = 5.549404e-009
 PTHA0 = 5.731013e+001
 PTHA1 = -5.526753e-002
 PTHA2 = 1.211345e-005

PTCA0 = 3.282602e+002
 PTCA1 = 7.474420e-001
 PTCA2 = 4.910293e-002
 PTCB0 = 3.030700e+001
 PTCB1 = 2.266667e-003
 PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.72	1060.6	789.0	14.69	-0.01
100.00	5294.0	787.0	99.75	-0.05
199.98	10258.2	785.0	199.74	-0.05
299.96	15211.7	784.0	299.79	-0.03
399.97	20152.9	784.0	399.87	-0.02
499.98	25081.5	784.0	499.96	-0.01
399.99	20164.8	787.0	400.12	0.03
299.99	15230.7	785.0	300.18	0.04
199.99	10281.5	787.0	200.22	0.04
100.01	5316.6	787.0	100.21	0.04
14.72	1065.5	786.0	14.79	0.01

THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	1662.90	1036.30
4.50	1380.00	1028.78
11.50	1094.00	1043.27
18.50	857.00	1063.86
25.50	667.40	1083.45
32.50	518.70	1101.86

TEMP (ITS90)	SPAN (mV)
0.00	30.31
30.00	30.38

$$y = \text{thermistor output}; t = P_{\text{TEMPA0}} + P_{\text{TEMPA1}} * y + P_{\text{TEMPA2}} * y^2$$

$$x = \text{pressure output} - P_{\text{TC A0}} - P_{\text{TC A1}} * t - P_{\text{TC A2}} * t^2$$

$$n = x * P_{\text{TC B0}} / (P_{\text{TC B0}} + P_{\text{TC B1}} * t + P_{\text{TC B2}} * t^2)$$

$$\text{pressure (psia)} = P_{\text{A0}} + P_{\text{A1}} * n + P_{\text{A2}} * n^2$$

Date, Avg Delta P %FS

04-Feb-08 -0.00

