

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1623

CALIBRATION DATE: 07-Dec-11

SBE 39 PRESSURE CALIBRATION DATA

508 psia S/N 5407

COEFFICIENTS:

PA0 = 1.906876e-001

PA1 = 2.408341e-002

PA2 = 1.560271e-009

PTHA0 = -9.249665e+001

PTHA1 = 4.468237e-002

PTHA2 = -3.215812e-007

PTCA0 = -5.844188e+002

PTCA1 = 4.139960e-001

PTCA2 = -2.443443e-003

PTCB0 = 2.431613e+001

PTCB1 = -1.575000e-003

PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.83	30.8	2611.0	14.84	0.00
105.05	3768.2	2619.0	105.00	-0.01
205.05	7912.4	2620.0	205.04	-0.00
305.06	12053.6	2620.0	305.05	-0.00
405.07	16192.3	2621.0	405.06	-0.00
505.07	20328.3	2621.0	505.06	-0.00
405.10	16194.3	2621.0	405.11	0.00
305.10	12056.4	2622.0	305.12	0.00
205.11	7916.0	2622.0	205.13	0.00
105.12	3773.3	2622.0	105.13	0.00
14.83	31.0	2625.0	14.84	0.00

THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	2067.30	35.50
4.50	2206.00	37.86
11.50	2367.80	40.44
18.50	2530.30	42.93
25.50	2693.00	45.13
32.50	2856.20	46.89

TEMP (ITS90)	SPAN (mV)
-5.00	24.32
35.00	24.26

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

$$x = \text{pressure output} - P_{\text{TCA0}} - P_{\text{TCA1}} * t - P_{\text{TCA2}} * t^2$$

$$n = x * P_{\text{TCB0}} / (P_{\text{TCB0}} + P_{\text{TCB1}} * t + P_{\text{TCB2}} * t^2)$$

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

Date, Avg Delta P %FS

07-Dec-11 -0.00

