# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1802 CALIBRATION DATE: 10-Oct-16 SBE 39 PRESSURE CALIBRATION DATA 508 psia S/N 6473

### **COEFFICIENTS:**

PA0 =	9.189528e-002	PTCA0 =	-5.380139e+002
PA1 =	2.402144e-002	PTCA1 =	3.509361e-001
PA2 =	2.610653e-009	PTCA2 =	-8.040596e-003
PTHA0 =	-8.925451e+001	PTCB0 =	2.429538e+001
PTHA1 =	4.637228e-002	PTCB1 =	-1.525000e-003
PTHA2 =	-4.930231e-007	PTCB2 =	0.000000e+000

### PRESSURE SPAN CALIBRATION

### THERMAL CORRECTION

PRESSURE	INSTRUMENT	THERMISTOR	COMPUTED	RESIDUAL	TEMP	THERMISTOR	INSTRUMENT
(PSIA)	OUTPUT (counts)	OUTPUT (counts)	PRESSURE (PSIA	) (%FSR)	(°C)	OUTPUT (counts)	OUTPUT (counts)
14.64	69.4	2461.0	14.61	-0.00	-1.50	1932.20	76.40
104.70	3814.3	2468.0	104.74	0.01	1.00	1988.30	77.37
204.71	7963.2	2471.0	204.69	-0.01	4.50	2067.20	78.44
304.71	12110.0	2472.0	304.67	-0.01	8.00	2146.00	79.31
404.71	16254.1	2472.0	404.68	-0.01	11.50	2225.50	79.97
504.72	20396.7	2473.0	504.74	0.00	15.00	2304.60	80.48
404.71	16256.4	2473.0	404.73	0.00	18.50	2384.20	80.68
304.72	12112.3	2473.0	304.73	0.00	22.00	2463.60	80.72
204.72	7965.2	2473.0	204.74	0.00	25.50	2543.60	80.48
104.72	3815.6	2473.0	104.78	0.01	29.00	2623.40	80.98
14.64	69.3	2473.0	14.61	-0.01	32.50	2703.10	79.65

TEMPERATURE (°C) SPAN (mV)
-5.00 24.30
35.00 24.24

y = thermistor output (counts)

 $t = PTHA0 + PTHA1 * y + PTHA2 * y^2$ 

 $x = instrument output - PTCA0 - PTCA1 * t - PTCA2 * t^2$ 

 $n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^{2})$ 

pressure (PSIA) =  $PA0 + PA1 * n + PA2 * n^2$ 

