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SENSOR SERIAL NUMBER: 1251
CALIBRATION DATE: 03-Nov-23

SBE 37 PRESSURE CALIBRATION DATA
1500 psia S/N 193472

COEFFICIENTS:

PA0 = 7.856856e-002
PA1 = 5.968301e-002
PA2 = 2.272248e-008

PTCA0 = -1.463388e+002
PTCA1 = 6.536535e-002
PTCA2 = -3.626392e-004
PTCB0 = 2.980200e+001
PTCB1 = -0.000000e+000
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	TEMPERATURE (°C)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	INSTRUMENT OUTPUT (counts)
14.58	100.3	23.1	14.72	0.01	32.50	104.70
314.86	5101.5	23.2	313.83	-0.07	29.00	103.80
614.86	10097.4	23.2	613.76	-0.07	24.00	103.76
914.82	15079.8	23.2	914.01	-0.05	18.50	103.69
1214.90	20045.7	23.2	1214.38	-0.03	15.00	103.66
1514.85	24993.0	23.1	1514.75	-0.01	4.50	103.20
1214.66	20060.8	23.1	1215.30	0.04	1.00	102.37
914.63	15105.3	23.1	915.55	0.06	TEMPERATURE (°C)	SPAN
614.61	10128.9	23.1	615.66	0.07		
314.64	5129.0	23.1	315.48	0.06		
14.58	97.6	23.1	14.56	-0.00		
					0.00	29.80
					30.00	29.80

$$x = \text{instrument output} - \text{PTCA0} - \text{PTCA1} * t - \text{PTCA2} * t^2$$

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

$$\text{pressure (PSIA)} = \text{PA0} + \text{PA1} * n + \text{PA2} * n^2$$

$$\text{Residual (\%FSR)} = (\text{computed pressure} - \text{true pressure}) * 100 / \text{Full Scale Range}$$

