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SENSOR SERIAL NUMBER: 1244  
CALIBRATION DATE: 09-Feb-23

SBE 37 PRESSURE CALIBRATION DATA  
1500 psia S/N 193465

#### COEFFICIENTS:

PA0 = 5.526736e+000  
PA1 = 6.020139e-002  
PA2 = 2.538269e-008

PTCA0 = -7.346067e+001  
PTCA1 = 3.138020e+000  
PTCA2 = 2.586502e-002  
PTCB0 = 2.983100e+001  
PTCB1 = 2.133333e-003  
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) |
|-----------------|----------------------------|------------------|--------------------------|-----------------|------------------|----------------------------|
| 14.56           | 167.4                      | 24.4             | 14.48                    | -0.01           | 32.50            | 220.50                     |
| 314.93          | 5136.1                     | 24.5             | 313.71                   | -0.08           | 29.00            | 202.52                     |
| 614.82          | 10098.6                    | 24.3             | 613.91                   | -0.06           | 24.00            | 180.80                     |
| 914.89          | 15036.9                    | 24.3             | 913.82                   | -0.07           | 18.50            | 158.02                     |
| 1214.94         | 19966.6                    | 24.3             | 1214.44                  | -0.03           | 15.00            | 141.11                     |
| 1514.90         | 24870.7                    | 24.2             | 1514.76                  | -0.01           | 4.50             | 109.73                     |
| 1214.74         | 19982.0                    | 24.2             | 1215.42                  | 0.05            | 1.00             | 90.59                      |
| 914.59          | 15067.3                    | 24.1             | 915.74                   | 0.08            | TEMPERATURE (°C) | SPAN                       |
| 614.79          | 10128.9                    | 24.2             | 615.77                   | 0.07            |                  |                            |
| 314.80          | 5166.3                     | 24.2             | 315.62                   | 0.05            |                  |                            |
| 14.55           | 176.0                      | 24.9             | 14.86                    | 0.02            |                  |                            |
|                 |                            |                  |                          |                 | -0.00            | 29.83                      |
|                 |                            |                  |                          |                 | 30.00            | 29.90                      |

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

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

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

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

