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SENSOR SERIAL NUMBER: 0015
CALIBRATION DATE: 08-Jan-21

Prawler CTD PRESSURE CALIBRATION DATA
870 psia S/N 3270595

COEFFICIENTS:

PA0 =	3.808819e-001	PTCA0 =	5.245140e+005
PA1 =	2.934533e-003	PTCA1 =	7.406288e+000
PA2 =	1.738898e-011	PTCA2 =	-6.893464e-002
PTEMPA0 =	-6.094044e+001	PTCB0 =	2.499088e+001
PTEMPA1 =	5.464740e-002	PTCB1 =	-2.250000e-004
PTEMPA2 =	-7.333014e-007	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
14.57	529482.0	1548.0	14.58	0.00	32.50	1751	529812.25
179.82	585738.0	1549.0	179.77	-0.01	29.00	1683	529800.67
359.83	647014.0	1549.0	359.81	-0.00	24.00	1589	529783.50
539.82	708248.0	1551.0	539.87	0.00	18.50	1483	529757.25
719.84	769416.0	1551.0	719.86	0.00	15.00	1417	529738.75
869.84	820340.0	1551.0	869.80	-0.00	4.50	1217	529678.33
719.87	769427.0	1552.0	719.89	0.00	1.00	1151	529650.33
539.87	708248.0	1552.0	539.87	-0.00			
359.88	647037.0	1551.0	359.88	0.00			
179.87	585769.0	1551.0	179.86	-0.00			
14.59	529496.0	1554.0	14.62	0.00			
					TEMPERATURE (°C)		SPAN
					-5.00		24.99
					35.00		24.98

y = thermistor output (counts)

$$t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

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

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

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

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

Date, Offset (%FSR)

● 08-Jan-21 0.00

