SENSOR SERIAL NUMBER: 0045
CALIBRATION DATE: 27-Apr-23

Prawler CTD PRESSURE CALIBRATION DATA
870 psia S/N 11573953

COEFFICIENTS:

PA0 =	1.008183e-001	PTCA0 =	5.244820e+005
PA1 =	2.671902e-003	PTCA1 =	2.531748e+000
PA2 =	1.824812e-011	PTCA2 =	-3.824700e-002
PTEMPA0 =	-8.135224e+001	PTCB0 =	2.533734e+001
PTEMPA1 =	4.629004e-002	PTCB1 =	2.225000e-003
PTEMPA2 =	-4.850334e-008	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)
14.62	529966.0	2220.0	14.63	0.00
179.79	591855.0	2220.0	179.77	-0.00
359.83	659256.0	2220.0	359.77	-0.01
539.82	726607.0	2220.0	539.80	-0.00
719.81	793891.0	2220.0	719.82	0.00
869.84	849900.0	2220.0	869.80	-0.00
719.81	793901.0	2220.0	719.85	0.00
539.80	726621.0	2219.0	539.84	0.00
359.81	659272.0	2219.0	359.81	0.00
179.80	591874.0	2218.0	179.82	0.00
14.62	529965.0	2219.0	14.63	0.00

THERMAL CORRECTION

TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
32.50	2466	530056.10
29.00	2390	530054.30
24.00	2281	530051.80
18.50	2162	530048.50
15.00	2086	530043.80
4.50	1858	530022.90
1.00	1783	530017.00

TEMPERATURE (°C)	SPAN
-4.20	25.33
35.80	25.42

y = thermistor output (counts)

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

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

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

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

Residual (%FSR) = (computed pressure - true pressure) * 100 / Full Scale Range

Date, Offset (%FSR)

● 16-Dec-20   -0.00
▲ 27-Apr-23   -0.00

POST CRUISE CALIBRATION