Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 0042
CALIBRATION DATE: 10-Apr-19

SBE 49 PRESSURE CALIBRATION DATA
508 psia S/N 2012

COEFFICIENTS:

PA0 =	9.734799e-002	PTCA0 =	5.246553e+005
PA1 =	1.567208e-003	PTCA1 =	6.762066e+000
PA2 =	7.470692e-012	PTCA2 =	-1.765956e-001
PTEMPA0 =	-7.456369e+001	PTCB0 =	2.480350e+001
PTEMPA1 =	4.927528e+001	PTCB1 =	3.000000e-004
PTEMPA2 =	-2.250414e-001	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)
14.78	534095.0	2.0	14.79	0.00
105.05	591668.0	2.0	105.03	-0.00
205.05	655434.0	2.0	205.03	-0.00
305.06	719171.0	2.0	305.05	-0.00
405.07	782864.0	2.0	405.06	-0.00
505.07	846517.0	2.0	505.07	-0.00
405.07	782880.0	2.0	405.08	0.00
305.07	719204.0	2.0	305.10	0.01
205.07	655461.0	2.0	205.07	0.00
105.07	591702.0	2.0	105.08	0.00
14.79	534100.0	2.0	14.80	0.00

THERMAL CORRECTION

TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
32.50	2.19	534687.73
29.00	2.12	534703.05
24.00	2.02	534716.07
18.50	1.91	534720.35
15.00	1.83	534716.14
4.50	1.62	534680.74
1.00	1.54	534662.64

TEMPERATURE (°C)	SPAN
-5.00	24.80
35.00	24.81

y = thermistor output (counts)

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

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

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

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

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