

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

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

SENSOR SERIAL NUMBER: 1623 CALIBRATION DATE: 18-Apr-23

SBE 39 PRESSURE CALIBRATION DATA 508 psia S/N 5407

COEFFICIENTS:

PA0 =	1.956598e-001	PTCA0 =	-5.843260e+002
PA1 =	2.410335e-002	PTCA1 =	4.359315e-001
PA2 =	1.537874e-009	PTCA2 =	-2.963696e-003
PTHA0 =	-9.224831e+001	PTCB0 =	2.431613e+001
PTHA1 =	4.448885e-002	PTCB1 =	-1.575000e-003
PTHA2 =	-2.795076e-007	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE	INSTRUMENT	THERMISTOR	COMPUTED	RESIDUAL	TEMP	THERMISTOR	INSTRUMENT
(PSIA)	OUTPUT (counts)	OUTPUT (counts)	PRESSURE (PSIA)	(%FSR)	(°C)	OUTPUT (counts)	OUTPUT (counts)
14.42	13.5	2608.0	14.43	0.00	-1.50	2066.80	14.00
104.70	3750.9	2614.0	104.67	-0.01	1.00	2124.40	15.36
204.70	7890.4	2618.0	204.67	-0.01	4.50	2205.00	15.93
304.71	12028.6	2619.0	304.70	-0.00	8.00	2286.10	17.76
404.71	16163.9	2620.0	404.70	-0.00	11.50	2366.90	19.17
504.71	20296.3	2621.0	504.69	-0.00	15.00	2448.60	20.46
404.70	16165.2	2622.0	404.74	0.01	18.50	2529.60	21.83
304.71	12030.1	2623.0	304.73	0.01	22.00	2611.00	22.99
204.70	7892.4	2623.0	204.72	0.00	25.50	2692.10	23.66
104.71	3752.2	2623.0	104.70	-0.00	29.00	2774.00	24.68
14.43	14.0	2624.0	14.44	0.00	32.50	2855.00	25.55

TEMPERATURE (°C) SPAN 24.32 -5.00 35.00 24.26

y = thermistor output (counts)

 $t = PTHA0 + PTHA1 * y + PTHA2 * y^2$

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

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

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

