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

SENSOR SERIAL NUMBER: 0967 CALIBRATION DATE: 15-Jan-25

## SBE 39 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

a0 = -2.018221e-004 a1 = 3.266766e-004 a2 = -6.934296e-006 a3 = 2.808092e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
-1.5000	852448.7	-1.5001	-0.0001
1.0000	760424.4	1.0000	0.0000
4.5000	649860.3	4.5001	0.0001
8.0000	557154.5	8.0001	0.0001
11.5000	479169.6	11.4999	-0.0001
15.0000	413356.4	14.9998	-0.0002
18.5000	357636.3	18.4999	-0.0001
22.0000	310321.5	22.0002	0.0002
25.5000	270029.5	25.5002	0.0002
29.0001	235618.7	28.9999	-0.0002
32.5000	206141.1	32.5000	0.0000

n = Instrument Output (counts)

Temperature ITS-90 (°C) =  $1/{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]} - 273.15$ 

Residual ( ${}^{\circ}C$ ) = instrument temperature - bath temperature

