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SENSOR SERIAL NUMBER: 0561 CALIBRATION DATE: 03-May-23

SBE 39 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

a0 = -2.843087e-005 a1 = 2.813852e-004 a2 = -2.760967e-006 a3 = 1.706037e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	715867.1	-1.5000	0.0000
1.0000	639965.3	1.0000	-0.0000
4.5000	548576.8	4.5000	-0.0000
8.0000	471756.2	8.0000	-0.0000
11.5000	406962.4	11.5000	0.0000
15.0000	352136.0	15.0001	0.0001
18.5000	305599.0	18.5000	0.0000
22.0000	265973.9	22.0000	-0.0000
25.5000	232133.8	25.4999	-0.0001
29.0000	203149.2	29.0000	-0.0000
32.5000	178253.3	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

