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SENSOR SERIAL NUMBER: 0815 CALIBRATION DATE: 02-May-23

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

## **COEFFICIENTS:**

a0 = -9.217675e-005 a1 = 3.078127e-004 a2 = -5.765548e-006 a3 = 2.618871e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	792001.4	-1.5000	0.0000
1.0000	706972.9	1.0000	-0.0000
4.5000	604705.4	4.5000	0.0000
8.0000	518857.1	8.0000	-0.0000
11.5000	446557.1	11.5000	-0.0000
15.0000	385477.8	15.0000	0.0000
18.5000	333719.7	18.5000	0.0000
22.0000	289730.1	22.0000	0.0000
25.5000	252233.9	25.5000	-0.0000
29.0000	220181.4	29.0000	-0.0000
32.5000	192706.1	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

