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SENSOR SERIAL NUMBER: 4287 SBE 16plus TEMPERATURE CALIBRATION DATE: 06-Apr-23 ITS-90 TEMPERATURE

SBE 16plus TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

a0 = 1.267492e-003 a1 = 2.577207e-004 a2 = 5.676306e-007 a3 = 1.254392e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
0.9999	623708.700	0.9999	0.0000
4.5000	553869.400	4.5000	-0.0000
15.0000	380496.100	14.9999	-0.0001
18.5000	333933.455	18.5002	0.0002
24.0000	270729.200	24.0000	-0.0000
29.0000	222619.700	28.9998	-0.0002
32.5000	193559.400	32.5001	0.0001

n = Instrument Output (counts)

MV = (n - 524288) / 1.6e + 007

R = (MV \* 2.900e + 0.09 + 1.024e + 0.08) / (2.048e + 0.04 - MV \* 2.0e + 0.05)

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

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

