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SENSOR SERIAL NUMBER: 7020 CALIBRATION DATE: 20-Dec-17

SBE 16plus V2 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

a0 = 1.243872e-003 a1 = 2.774131e-004 a2 = -1.367840e-006 a3 = 1.917609e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
1.0000	555663.900	1.0001	0.0001
4.5000	490513.700	4.4999	-0.0001
15.0000	331437.900	15.0002	0.0002
18.5000	289362.400	18.4999	-0.0001
24.0000	232658.700	24.0000	0.0000
29.0000	189823.000	29.0000	-0.0000
32.5000	164084.100	32.5000	0.0000

n = Instrument Output (counts)

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

R = (MV \* 2.900e+009 + 1.024e+008) / (2.048e+004 - MV \* 2.0e+005)

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

