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SENSOR SERIAL NUMBER: 0041
CALIBRATION DATE: 28-Apr-19

SBE 49 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 8.669274e-004
a1 = 2.760271e-004
a2 = -1.484860e-006
a3 = 1.918920e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	682091.153	1.0001	0.0001
4.5000	601809.119	4.4998	-0.0002
15.0000	399696.983	15.0001	0.0001
18.5000	344653.356	18.5002	0.0002
23.9999	269331.000	23.9997	-0.0002
29.0000	211478.814	28.9999	-0.0001
32.5001	176299.780	32.5002	0.0001

n = Instrument Output (counts)

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

$R = (MV * 2.295e+010 + 9.216e+008) / (6.144e+004 - MV * 5.3e+005)$

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

Residual (°C) = instrument temperature - bath temperature

