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SENSOR SERIAL NUMBER: 0765
CALIBRATION DATE: 15-Dec-17

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 7.369437e-004 TA2 = 1.416154e-006

TA1 = 2.430016e-004 TA3 = 7.409796e-008

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
1.9999	1.12107	2.0000	0.00008
2.0000	1.12107	2.0000	-0.00002
2.0001	1.12107	2.0000	-0.00012
2.0001	1.12107	2.0000	-0.00012
5.9999	0.99604	6.0001	0.00018
5.9999	0.99604	6.0001	0.00018
6.0000	0.99604	6.0001	0.00008
6.0000	0.99604	6.0001	0.00008
11.9999	0.82918	11.9999	0.00004
12.0000	0.82918	11.9999	-0.00006
12.0001	0.82918	11.9999	-0.00016
12.0003	0.82918	11.9999	-0.00036
20.0000	0.64456	20.0003	0.00027
20.0000	0.64457	19.9998	-0.00022
20.0001	0.64456	20.0003	0.00017
20.0002	0.64456	20.0003	0.00007
25.9999	0.53212	26.0000	0.00011
26.0000	0.53212	26.0000	0.00001
26.0001	0.53212	26.0000	-0.00009
26.0001	0.53212	26.0000	-0.00009
29.9999	0.46811	29.9997	-0.00022
30.0000	0.46810	30.0004	0.00035
30.0001	0.46811	29.9997	-0.00042
30.0001	0.46810	30.0004	0.00025

V = Instrument Output (Volts)

$L = \ln(100000 * V / (3.3 - V))$

Temperature ITS-90 (°C) = $1 / (TA0 + (TA1 * L) + (TA2 * L^2) + (TA3 * L^3)) - 273.15$

Residual (°C) = instrument temperature - bath temperature

