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SENSOR SERIAL NUMBER: 0765
CALIBRATION DATE: 12-Oct-19

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.855549e-004 TA2 = -4.512956e-008

TA1 = 2.580140e-004 TA3 = 1.214942e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
1.9999	1.12105	2.0000	0.00007
2.0000	1.12105	2.0000	-0.00003
2.0001	1.12105	2.0000	-0.00013
2.0001	1.12105	2.0000	-0.00013
6.0000	0.99603	6.0002	0.00016
6.0001	0.99603	6.0002	0.00006
6.0001	0.99603	6.0002	0.00006
6.0002	0.99602	6.0005	0.00029
11.9998	0.82918	11.9998	-0.00001
11.9999	0.82918	11.9998	-0.00011
11.9999	0.82918	11.9998	-0.00011
12.0001	0.82918	11.9998	-0.00031
19.9998	0.64456	20.0000	0.00020
19.9998	0.64456	20.0000	0.00020
19.9999	0.64456	20.0000	0.00010
19.9999	0.64457	19.9995	-0.00038
25.9997	0.53212	25.9999	0.00020
25.9999	0.53212	25.9999	-0.00000
26.0001	0.53212	25.9999	-0.00020
26.0003	0.53211	26.0005	0.00019
29.9999	0.46811	30.0000	0.00007
30.0000	0.46811	30.0000	-0.00003
30.0000	0.46811	30.0000	-0.00003
30.0001	0.46811	30.0000	-0.00013

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

