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SENSOR SERIAL NUMBER: 0765
CALIBRATION DATE: 03-Nov-23

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.698001e-004 TA2 = -4.715577e-007

TA1 = 2.625031e-004 TA3 = 1.350001e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
2.0000	1.12104	2.0000	0.00003
2.0001	1.12104	2.0000	-0.00007
2.0001	1.12104	2.0000	-0.00007
2.0002	1.12103	2.0003	0.00013
6.0000	0.99602	6.0003	0.00028
6.0000	0.99603	6.0000	-0.00005
6.0001	0.99603	6.0000	-0.00015
6.0001	0.99603	6.0000	-0.00015
11.9999	0.82917	12.0000	0.00009
12.0000	0.82917	12.0000	-0.00001
12.0001	0.82917	12.0000	-0.00011
12.0002	0.82916	12.0004	0.00018
19.9999	0.64456	19.9999	0.00003
20.0000	0.64456	19.9999	-0.00007
20.0000	0.64456	19.9999	-0.00007
20.0001	0.64456	19.9999	-0.00017
25.9999	0.53212	26.0001	0.00020
25.9999	0.53212	26.0001	0.00020
26.0001	0.53212	26.0001	-0.00000
26.0002	0.53212	26.0001	-0.00010
29.9999	0.46812	29.9998	-0.00007
30.0000	0.46812	29.9998	-0.00017
30.0000	0.46812	29.9998	-0.00017
30.0002	0.46811	30.0005	0.00030

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

