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SENSOR SERIAL NUMBER: 1754
CALIBRATION DATE: 25-Mar-25

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.947230e-04 TA2 = 4.491489e-07
TA1 = 2.530384e-04 TA3 = 1.098132e-07

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
1.9999	1.12486	2.0001	0.00015
2.0000	1.12485	2.0004	0.00036
2.0001	1.12487	1.9997	-0.00036
2.0002	1.12486	2.0001	-0.00015
6.0000	1.00028	6.0001	0.00007
6.0001	1.00027	6.0004	0.00030
6.0002	1.00028	6.0001	-0.00013
6.0004	1.00028	6.0001	-0.00033
11.9998	0.83381	12.0002	0.00037
11.9998	0.83382	11.9998	-0.00002
12.0002	0.83381	12.0002	-0.00003
12.0002	0.83381	12.0002	-0.00003
19.9998	0.64932	19.9997	-0.00009
20.0000	0.64932	19.9997	-0.00029
20.0000	0.64932	19.9997	-0.00029
20.0001	0.64931	20.0002	0.00010
26.0000	0.53673	26.0002	0.00020
26.0000	0.53673	26.0002	0.00020
26.0001	0.53673	26.0002	0.00010
26.0001	0.53673	26.0002	0.00010
29.9996	0.47257	29.9994	-0.00024
29.9999	0.47256	30.0000	0.00013
29.9999	0.47256	30.0000	0.00013
30.0003	0.47256	30.0000	-0.00027

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

