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SENSOR SERIAL NUMBER: 1910
CALIBRATION DATE: 25-Mar-25

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 7.191549e-04 TA2 = 1.192415e-06
TA1 = 2.456124e-04 TA3 = 8.533985e-08

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
1.9999	1.12462	1.9999	-0.00003
2.0000	1.12460	2.0005	0.00048
2.0001	1.12462	1.9999	-0.00023
2.0002	1.12462	1.9999	-0.00033
6.0000	1.00007	6.0002	0.00024
6.0001	1.00007	6.0002	0.00014
6.0002	1.00007	6.0002	0.00004
6.0004	1.00007	6.0002	-0.00016
11.9998	0.83368	11.9998	-0.00002
11.9998	0.83368	11.9998	-0.00002
12.0002	0.83367	12.0002	-0.00003
12.0002	0.83367	12.0002	-0.00003
19.9998	0.64926	19.9995	-0.00026
20.0000	0.64925	20.0000	0.00003
20.0000	0.64925	20.0000	0.00003
20.0001	0.64925	20.0000	-0.00007
26.0000	0.53671	26.0002	0.00017
26.0000	0.53671	26.0002	0.00017
26.0001	0.53671	26.0002	0.00007
26.0001	0.53671	26.0002	0.00007
29.9996	0.47257	29.9994	-0.00023
29.9999	0.47256	30.0000	0.00014
29.9999	0.47256	30.0000	0.00014
30.0003	0.47256	30.0000	-0.00026

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

