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SENSOR SERIAL NUMBER: 1802  
CALIBRATION DATE: 25-Mar-25

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 7.331960e-04    TA2 = 1.470273e-06  
TA1 = 2.425800e-04    TA3 = 7.669295e-08

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
1.9999	1.11773	2.0001	0.00017
2.0000	1.11772	2.0004	0.00038
2.0001	1.11774	1.9998	-0.00034
2.0002	1.11773	2.0001	-0.00013
6.0000	0.99356	5.9999	-0.00014
6.0001	0.99355	6.0002	0.00010
6.0002	0.99355	6.0002	-0.00000
6.0004	0.99355	6.0002	-0.00020
11.9998	0.82778	12.0000	0.00018
11.9998	0.82778	12.0000	0.00018
12.0002	0.82778	12.0000	-0.00022
12.0002	0.82777	12.0004	0.00017
19.9998	0.64425	19.9997	-0.00013
20.0000	0.64425	19.9997	-0.00033
20.0000	0.64424	20.0002	0.00016
20.0001	0.64424	20.0002	0.00006
26.0000	0.53235	25.9999	-0.00006
26.0000	0.53235	25.9999	-0.00006
26.0001	0.53235	25.9999	-0.00016
26.0001	0.53234	26.0005	0.00043
29.9996	0.46861	29.9992	-0.00035
29.9999	0.46859	30.0006	0.00069
29.9999	0.46860	29.9999	0.00002
30.0003	0.46860	29.9999	-0.00038

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

