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SENSOR SERIAL NUMBER: 1018
CALIBRATION DATE: 13-Sep-24

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.862350e-004 TA2 = 2.860583e-007

TA1 = 2.551758e-004 TA3 = 1.141253e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
2.0268	1.12151	2.0267	-0.00009
2.0299	1.12141	2.0298	-0.00011
2.0303	1.12139	2.0304	0.00011
2.0311	1.12136	2.0313	0.00024
6.0000	0.99798	6.0002	0.00016
6.0000	0.99799	5.9998	-0.00018
6.0001	0.99799	5.9998	-0.00028
6.0002	0.99798	6.0002	-0.00004
12.0000	0.83182	12.0000	-0.00004
12.0000	0.83181	12.0003	0.00035
12.0000	0.83182	12.0000	-0.00004
12.0000	0.83182	12.0000	-0.00004
20.0000	0.64771	20.0003	0.00033
20.0000	0.64772	19.9998	-0.00016
20.0001	0.64772	19.9998	-0.00026
20.0001	0.64771	20.0003	0.00023
26.0000	0.53541	26.0000	-0.00004
26.0000	0.53541	26.0000	-0.00004
26.0001	0.53541	26.0000	-0.00014
26.0001	0.53541	26.0000	-0.00014
29.9999	0.47140	30.0001	0.00017
30.0000	0.47140	30.0001	0.00007
30.0001	0.47140	30.0001	-0.00003
30.0001	0.47140	30.0001	-0.00003

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

