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SENSOR SERIAL NUMBER: 1018
CALIBRATION DATE: 24-Nov-20

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.641546e-004 TA2 = -3.358919e-007
TA1 = 2.615984e-004 TA3 = 1.341728e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
2.0000	1.12239	2.0001	0.00008
2.0000	1.12239	2.0001	0.00008
2.0001	1.12239	2.0001	-0.00002
2.0001	1.12239	2.0001	-0.00002
5.9999	0.99801	5.9997	-0.00019
6.0000	0.99800	6.0000	0.00004
6.0001	0.99800	6.0000	-0.00006
6.0001	0.99800	6.0000	-0.00006
12.0000	0.83182	12.0004	0.00041
12.0001	0.83183	12.0000	-0.00008
12.0001	0.83183	12.0000	-0.00008
12.0001	0.83183	12.0000	-0.00008
20.0000	0.64772	20.0001	0.00009
20.0000	0.64772	20.0001	0.00009
20.0001	0.64772	20.0001	-0.00001
20.0001	0.64772	20.0001	-0.00001
25.9998	0.53542	25.9996	-0.00020
25.9999	0.53542	25.9996	-0.00030
26.0001	0.53541	26.0002	0.00008
26.0001	0.53541	26.0002	0.00008
30.0000	0.47140	30.0004	0.00043
30.0000	0.47141	29.9998	-0.00024
30.0001	0.47141	29.9998	-0.00034
30.0001	0.47140	30.0004	0.00033

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

