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SENSOR SERIAL NUMBER: 1788
CALIBRATION DATE: 27-Mar-25

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.746327e-04 TA2 = -4.745775e-08

TA1 = 2.584804e-04 TA3 = 1.256549e-07

| BATH TEMP (° C) | INSTRUMENT OUTPUT(V) | INST TEMP (° C) | RESIDUAL (° C) |
|--------------------|-------------------------|--------------------|-------------------|
| 2.0001 | 1.12307 | 2.0001 | -0.00003 |
| 2.0001 | 1.12307 | 2.0001 | -0.00003 |
| 2.0001 | 1.12307 | 2.0001 | -0.00003 |
| 2.0001 | 1.12307 | 2.0001 | -0.00003 |
| 6.0000 | 0.99869 | 6.0002 | 0.00018 |
| 6.0000 | 0.99870 | 5.9998 | -0.00015 |
| 6.0001 | 0.99869 | 6.0002 | 0.00008 |
| 6.0001 | 0.99869 | 6.0002 | 0.00008 |
| 12.0000 | 0.83251 | 12.0004 | 0.00039 |
| 12.0000 | 0.83252 | 12.0000 | -0.00000 |
| 12.0001 | 0.83252 | 12.0000 | -0.00010 |
| 12.0001 | 0.83252 | 12.0000 | -0.00010 |
| 20.0000 | 0.64837 | 19.9998 | -0.00018 |
| 20.0000 | 0.64837 | 19.9998 | -0.00018 |
| 20.0001 | 0.64837 | 19.9998 | -0.00028 |
| 20.0001 | 0.64837 | 19.9998 | -0.00028 |
| 25.9999 | 0.53600 | 26.0003 | 0.00040 |
| 25.9999 | 0.53600 | 26.0003 | 0.00040 |
| 26.0000 | 0.53600 | 26.0003 | 0.00030 |
| 26.0002 | 0.53600 | 26.0003 | 0.00010 |
| 29.9999 | 0.47196 | 29.9999 | -0.00001 |
| 30.0000 | 0.47196 | 29.9999 | -0.00011 |
| 30.0001 | 0.47196 | 29.9999 | -0.00021 |
| 30.0001 | 0.47196 | 29.9999 | -0.00021 |

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

