Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0580 CALIBRATION DATE: 25-Nov-15

SBE 39 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 5.267366e-005 a1 = 2.638252e-004 a2 = -1.935846e-006 a3 = 1.549770e-007

| BATH TEMP (° C) | INSTRUMENT OUTPUT (counts) | INST TEMP (° C) | RESIDUAL (° C) |
|--------------------|-------------------------------|--------------------|-------------------|
| -1.5000 | 830141.4 | -1.4999 | 0.0001 |
| 1.0000 | 741403.3 | 1.0000 | -0.0000 |
| 4.5000 | 634653.3 | 4.4999 | -0.0001 |
| 8.0000 | 545007.7 | 8.0000 | -0.0000 |
| 11.5000 | 469479.5 | 11.5000 | 0.0000 |
| 15.0000 | 405639.8 | 15.0001 | 0.0001 |
| 18.5000 | 351510.4 | 18.5000 | 0.0000 |
| 22.0000 | 305473.3 | 22.0000 | 0.0000 |
| 25.5000 | 266202.7 | 25.4999 | -0.0001 |
| 29.0000 | 232605.8 | 28.9999 | -0.0001 |
| 32.5000 | 203780.8 | 32.5001 | 0.0001 |

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1/{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]} - 273.15$

Residual ($^{\circ}$ C) = instrument temperature - bath temperature

