Sea-Bird Scientific 13431 NE 20<sup>th</sup> Street Bellevue, WA 98005 USA

## SENSOR SERIAL NUMBER: 0701 CALIBRATION DATE: 27-Feb-19

## SBE 3 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

g = 4.81963915e-003 h = 6.82725680e-004 i = 3.13748244e-005 j = 2.94152700e-006

f0 = 1000.0

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (Hz) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|---------------------------|--------------------|-------------------|
| -1.5000            | 5989.565                  | -1.4999            | 0.00008           |
| 1.0000             | 6335.506                  | 1.0000             | -0.00004          |
| 4.5000             | 6843.798                  | 4.4999             | -0.00010          |
| 8.0000             | 7380.751                  | 7.9999             | -0.00008          |
| 11.5000            | 7947.111                  | 11.5000            | 0.00005           |
| 15.0000            | 8543.566                  | 15.0001            | 0.00012           |
| 18.5000            | 9170.805                  | 18.5002            | 0.00015           |
| 22.0000            | 9829.458                  | 22.0000            | 0.00003           |
| 25.5000            | 10520.163                 | 25.4998            | -0.00018          |
| 29.0000            | 11243.561                 | 28.9998            | -0.00022          |
| 32.5000            | 12000.285                 | 32.5002            | 0.00020           |

f = Instrument Output (Hz)

Temperature ITS-90 (°C) =  $1/\{g + h[ln(f0/f)] + i[ln^2(f0/f)] + j[ln^3(f0/f)]\} - 273.15$ 

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

