

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2023
CALIBRATION DATE: 01-Jan-11

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.034427e+000
h = 1.482751e-001
i = 2.192409e-004
j = 1.871011e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.5476e-005

| BATH TEMP (ITS-90) | BATH SAL (PSU) | BATH COND (Siemens/m) | INST FREQ (Hz) | INST COND (Siemens/m) | RESIDUAL (Siemens/m) |
|-----------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------------|
| 22.0000 | 0.0000 | 0.00000 | 2635.75 | 0.00000 | 0.00000 |
| 1.0000 | 34.6933 | 2.96645 | 5166.23 | 2.96647 | 0.00002 |
| 4.5000 | 34.6733 | 3.27256 | 5359.03 | 3.27255 | -0.00001 |
| 15.0000 | 34.6301 | 4.25118 | 5932.71 | 4.25114 | -0.00004 |
| 18.5000 | 34.6209 | 4.59524 | 6121.37 | 4.59521 | -0.00002 |
| 24.0000 | 34.6101 | 5.15133 | 6414.30 | 5.15140 | 0.00006 |
| 29.0000 | 34.6041 | 5.67146 | 6676.28 | 5.67148 | 0.00001 |
| 32.5000 | 34.5996 | 6.04246 | 6856.86 | 6.04243 | -0.00003 |

$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

Conductivity = $(g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

