# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1018
CALIBRATION DATE: 23-Jul-13

SBE4 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Seimens/meter

GHIJ COEFFICIENTS

```
g = -4.08872971e+000
h =  4.62705116e-001
i = -4.52882350e-004
j =  4.83352968e-005
CPcor = -9.5700e-008 (nominal)
CTcor =  3.2500e-006 (nominal)
```

ABCDM COEFFICIENTS

```
a =  2.21886234e-006
b =  4.61189499e-001
c = -4.08408886e+000
d = -9.42988152e-005
m =  4.9
CPcor = -9.5700e-008 (nominal)
```

| BATH TEMP (ITS-90) | BATH SAL (PSU) | BATH COND (Siemens/m) | INST FREO (kHz) | INST COND (Siemens/m) | RESIDUAL (Siemens/m) |
|---|---|---|---|---|---|
| 0.0000 | 0.0000 | 0.00000 | 2.97559 | 0.00000 | 0.00000 |
| -1.0000 | 34.9131 | 2.81165 | 8.34655 | 2.81169 | 0.00004 |
| 1.0001 | 34.9136 | 2.98350 | 8.56553 | 2.98347 | -0.00003 |
| 15.0001 | 34.9145 | 4.28239 | 10.06560 | 4.28231 | -0.00009 |
| 18.5000 | 34.9145 | 4.62999 | 10.42984 | 4.63004 | 0.00006 |
| 29.0001 | 34.9139 | 5.71651 | 11.49168 | 5.71658 | 0.00007 |
| 32.5000 | 34.9079 | 6.09015 | 11.83399 | 6.09010 | -0.00005 |

Conductivity = $(g + hf^2 + if^3 + jf^4) / 10(1 + \delta t + \varepsilon p)$ Siemens/meter

Conductivity = $(af^m + bf^2 + c + dt) / [10 (1 + \varepsilon p)$ Siemens/meter

t = temperature[°C)]; p = pressure[decibars]; $\delta$ = CTcor; $\varepsilon$ = CPcor;

Residual = (instrument conductivity - bath conductivity) using g, h, i, j coefficients