# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2356
CALIBRATION DATE: 07-Feb-14

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

GHIJ COEFFICIENTS

```
g = -1.00894116e+001
h =  1.47164172e+000
i =  2.15984980e-004
j =  6.93524387e-005
CPcor = -9.5700e-008 (nominal)
CTcor =  3.2500e-006 (nominal)
```

ABCDM COEFFICIENTS

```
a =  1.68168096e-004
b =  1.47188543e+000
c = -1.00899136e+001
d = -8.53346312e-005
m =  3.7
CPcor = -9.5700e-008 (nominal)
```

| BATH TEMP (ITS-90) | BATH SAL (PSU) | BATH COND (Siemens/m) | INST FREQ (kHz) | INST COND (Siemens/m) | RESIDUAL (Siemens/m) |
|---|---|---|---|---|---|
| 0.0000 | 0.0000 | 0.00000 | 2.61745 | 0.00000 | 0.00000 |
| -0.9999 | 34.6189 | 2.79016 | 5.07591 | 2.79016 | -0.00000 |
| 1.0000 | 34.6187 | 2.96068 | 5.18841 | 2.96069 | 0.00001 |
| 15.0000 | 34.6174 | 4.24979 | 5.97026 | 4.24978 | -0.00001 |
| 18.5000 | 34.6166 | 4.59473 | 6.16257 | 4.59473 | 0.00000 |
| 29.0001 | 34.6137 | 5.67287 | 6.72802 | 5.67287 | 0.00000 |
| 32.5000 | 34.6040 | 6.04314 | 6.91145 | 6.04314 | -0.00000 |

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