# SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com


SENSOR SERIAL NUMBER: 0722
CALIBRATION DATE: 19-Feb-99

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

GHIJ COEFFICIENTS

```
g = -3.84339188e+000
h =  4.15076580e-001
i =  8.21141590e-005
j =  1.67015203e-005
CPcor = -9.5700e-008 (nominal)
CTcor =  3.2500e-006 (nominal)
```

ABCDM COEFFICIENTS

```
a =  3.60000290e-005
b =  4.15299788e-001
c = -3.84430075e+000
d = -8.63664920e-005
m =  3.8
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 | 3.04146 | 0.00000 | 0.00000 |
| -1.3234 | 33.8206 | 2.70504 | 8.60708 | 2.70504 | 0.00000 |
| 1.1239 | 33.8210 | 2.90932 | 8.88602 | 2.90933 | 0.00000 |
| 15.2535 | 33.8216 | 4.18649 | 10.46023 | 4.18647 | -0.00003 |
| 18.7230 | 33.8218 | 4.52223 | 10.83557 | 4.52225 | 0.00002 |
| 29.1115 | 33.8210 | 5.56885 | 11.92839 | 5.56886 | 0.00002 |
| 32.6623 | 33.8153 | 5.93784 | 12.28997 | 5.93783 | -0.00001 |

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