

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2164  
CALIBRATION DATE: 29-Apr-05

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

## GHIJ COEFFICIENTS

g = -9.68620860e+000  
h = 1.33495113e+000  
i = -2.24804238e-003  
j = 2.21833127e-004  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 7.68215154e-008  
b = 1.32841727e+000  
c = -9.67090144e+000  
d = -8.11351429e-005  
m = 7.0  
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	2.69817	0.00000	0.00000
-0.9999	34.9335	2.81314	5.33382	2.81312	-0.00002
1.0269	34.9338	2.98739	5.45533	2.98742	0.00004
15.0001	34.9344	4.28457	6.28582	4.28457	-0.00000
18.5001	34.9345	4.63236	6.49029	4.63233	-0.00004
29.0001	34.9325	5.71921	7.09104	5.71928	0.00007
32.5001	34.9275	6.09319	7.28608	6.09315	-0.00004

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

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

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

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

Date, Slope Correction

