

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1346  
CALIBRATION DATE: 27-Feb-08

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

## GHIJ COEFFICIENTS

g = -4.02171816e+000  
h = 5.29666130e-001  
i = 1.39696392e-005  
j = 3.01754338e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 4.01100420e-005  
b = 5.29616795e-001  
c = -4.02127526e+000  
d = -7.92658365e-005  
m = 3.9  
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	2.75483	0.00000	0.00000
-1.0000	34.9366	2.81336	7.77737	2.81335	-0.00001
1.0000	34.9367	2.98527	7.98186	2.98528	0.00001
15.0000	34.9377	4.28493	9.38252	4.28490	-0.00002
18.5000	34.9373	4.63268	9.72264	4.63271	0.00003
29.0000	34.9359	5.71970	10.71476	5.71967	-0.00002
32.5000	34.9302	6.09360	11.03500	6.09361	0.00001

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

