

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1041  
CALIBRATION DATE: 17-Jun-09

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

## GHIJ COEFFICIENTS

g = -4.12059781e+000  
h = 5.63790212e-001  
i = -2.75927682e-004  
j = 4.21099118e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 7.05512603e-006  
b = 5.62965135e-001  
c = -4.11831395e+000  
d = -8.30442218e-005  
m = 4.5  
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	2.70452	0.00000	0.00000
-1.0000	34.6282	2.79083	7.53519	2.79087	0.00004
1.0000	34.6290	2.96148	7.73276	2.96145	-0.00003
15.0000	34.6301	4.25118	9.08698	4.25113	-0.00005
18.5000	34.6296	4.59627	9.41596	4.59631	0.00005
29.0000	34.6290	5.67508	10.37588	5.67509	0.00001
32.5000	34.6244	6.04630	10.68583	6.04629	-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

Date, Slope Correction

