

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1538  
CALIBRATION DATE: 15-Feb-07

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

## GHIJ COEFFICIENTS

g = -4.20738141e+000  
h = 4.70715979e-001  
i = -1.16668709e-004  
j = 2.69380525e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 1.19364081e-005  
b = 4.70328248e-001  
c = -4.20595283e+000  
d = -8.08515911e-005  
m = 4.2  
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	2.99003	0.00000	0.00000
-1.0001	34.8567	2.80752	8.27368	2.80752	-0.00000
1.0160	34.8573	2.98052	8.49186	2.98053	0.00000
14.9999	34.8571	4.27608	9.97316	4.27606	-0.00002
18.4999	34.8560	4.62306	10.33339	4.62308	0.00002
28.9999	34.8532	5.70767	11.38459	5.70766	-0.00001
32.4999	34.8451	6.08043	11.72367	6.08043	0.00000

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

