

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1538  
CALIBRATION DATE: 23-Jan-08

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

## GHIJ COEFFICIENTS

g = -4.20911572e+000  
h = 4.71003642e-001  
i = -1.56551385e-004  
j = 2.87773673e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 9.01313389e-006  
b = 4.70490420e-001  
c = -4.20729708e+000  
d = -8.15623113e-005  
m = 4.3  
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	2.99007	0.00000	0.00000
-1.0000	34.9126	2.81161	8.27838	2.81159	-0.00002
1.0000	34.9124	2.98339	8.49493	2.98341	0.00002
15.0000	34.9129	4.28221	9.97903	4.28217	-0.00004
18.5000	34.9117	4.62966	10.33954	4.62971	0.00006
29.0000	34.9071	5.71551	11.39110	5.71547	-0.00005
32.5001	34.8949	6.08815	11.72986	6.08818	0.00003

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

