

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2973  
CALIBRATION DATE: 21-Aug-09

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

## GHIJ COEFFICIENTS

g = -9.96135689e+000  
h = 1.34667303e+000  
i = -1.28265813e-004  
j = 8.32931238e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 7.04782815e-005  
b = 1.34633249e+000  
c = -9.96071976e+000  
d = -8.33068832e-005  
m = 4.0  
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	2.71947	0.00000	0.00000
-0.9999	34.5514	2.78523	5.29573	2.78524	0.00001
1.0001	34.5518	2.95551	5.41349	2.95551	0.00000
15.0001	34.5530	4.24273	6.23163	4.24268	-0.00004
18.5001	34.5528	4.58718	6.43286	4.58719	0.00001
29.0001	34.5527	5.66399	7.02446	5.66405	0.00006
32.5001	34.5499	6.03478	7.21678	6.03474	-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

