

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0722  
CALIBRATION DATE: 11-Mar-05

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

## GHIJ COEFFICIENTS

g = -3.84476665e+000  
h = 4.15578468e-001  
i = 1.38838253e-005  
j = 2.01334271e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 2.73204853e-005  
b = 4.15552799e-001  
c = -3.84438643e+000  
d = -7.89789793e-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	3.04081	0.00000	0.00000
-1.0005	34.9440	2.81386	8.75524	2.81388	0.00002
0.9995	34.9447	2.98585	8.98661	2.98583	-0.00002
14.9995	34.9456	4.28574	10.57067	4.28572	-0.00002
18.4995	34.9459	4.63365	10.95515	4.63365	0.00000
28.9995	34.9442	5.72085	12.07627	5.72089	0.00004
32.4995	34.9380	6.09475	12.43783	6.09472	-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

