

# SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1374  
CALIBRATION DATE: 21-Aug-09

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

## GHIJ COEFFICIENTS

g = -3.96668534e+000  
h = 4.84495487e-001  
i = -2.19535256e-004  
j = 3.77227066e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 8.77246394e-006  
b = 4.83837890e-001  
c = -3.96483182e+000  
d = -8.53852971e-005  
m = 4.4  
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	2.86227	0.00000	0.00000
-0.9999	34.5514	2.78523	8.09819	2.78526	0.00003
1.0001	34.5518	2.95551	8.31130	2.95551	-0.00000
15.0001	34.5530	4.24273	9.77102	4.24264	-0.00008
18.5001	34.5528	4.58718	10.12545	4.58719	0.00001
29.0001	34.5527	5.66399	11.15924	5.66415	0.00015
32.5001	34.5499	6.03478	11.49285	6.03467	-0.00011

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

