

# 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: 1070  
CALIBRATION DATE: 23-Jan-08

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

## GHIJ COEFFICIENTS

g = -4.10352595e+000  
h = 5.93426989e-001  
i = -8.88173209e-005  
j = 3.77976827e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 2.46843900e-005  
b = 5.93177958e-001  
c = -4.10288548e+000  
d = -8.37097061e-005  
m = 4.1  
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	2.62957	0.00000	0.00000
-1.0000	34.9126	2.81161	7.35979	2.81160	-0.00001
1.0000	34.9124	2.98339	7.55292	2.98341	0.00002
15.0000	34.9129	4.28221	8.87625	4.28217	-0.00004
18.5000	34.9117	4.62966	9.19765	4.62971	0.00006
29.0000	34.9071	5.71551	10.13512	5.71546	-0.00005
32.5001	34.8949	6.08815	10.43713	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

