

# SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

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

SENSOR SERIAL NUMBER: 0073  
CALIBRATION DATE: 26-Aug-10

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

## GHIJ COEFFICIENTS

g = -1.00349719e+001  
h = 1.11141115e+000  
i = 3.81241926e-003  
j = -1.99348690e-004  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 4.80872869e-002  
b = 1.07031674e+000  
c = -1.00623644e+001  
d = -1.57689071e-004  
m = 2.1  
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)
22.0000	0.0000	0.00000	2.99191	0.00000	0.00000
1.0000	34.6370	2.96210	5.93187	2.96212	0.00002
4.4999	34.6174	3.26779	6.15543	3.26782	0.00003
15.0000	34.5748	4.24511	6.82088	4.24490	-0.00021
18.5000	34.5658	4.58871	7.04013	4.58881	0.00010
23.9999	34.5557	5.14412	7.38049	5.14426	0.00014
29.0000	34.5504	5.66365	7.68511	5.66357	-0.00008

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

