

# 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: 1679  
CALIBRATION DATE: 19-Jan-11

SBE 37 CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

## COEFFICIENTS:

g = -9.814811e-001  
h = 1.425124e-001  
i = -7.229327e-005  
j = 3.089667e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -7.8739e-006

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (Hz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
22.0000	0.0000	0.00000	2624.32	0.00000	0.00000
1.0000	34.7907	2.97399	5259.61	2.97399	0.00000
4.5000	34.7706	3.28084	5458.91	3.28083	-0.00001
15.0000	34.7270	4.26182	6051.40	4.26182	0.00000
18.5000	34.7176	4.60669	6246.06	4.60671	0.00002
23.9999	34.7076	5.16423	6548.19	5.16422	-0.00001
29.0000	34.7015	5.68563	6818.30	5.68560	-0.00002
32.4999	34.6968	6.05749	7004.42	6.05751	0.00002

$$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$$

$$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p) \text{ Siemens/meter}$$

$$t = \text{temperature}[^{\circ}\text{C}]; p = \text{pressure}[\text{decibars}]; \delta = \text{CTcor}; \epsilon = \text{CPcor};$$

$$\text{Residual} = \text{instrument conductivity} - \text{bath conductivity}$$

