

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: 0409
CALIBRATION DATE: 30-May-07

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

COEFFICIENTS:

g = -9.906913e-001	CPcor = -9.5700e-008
h = 1.382048e-001	CTcor = 3.2500e-006
i = -3.325860e-004	WBOTC = -7.7926e-005
j = 4.652347e-005	

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	2685.08	0.00000	0.00000
1.0000	34.8962	2.98214	5370.39	2.98215	0.00001
4.5000	34.8755	3.28976	5574.48	3.28976	-0.00000
15.0000	34.8316	4.27329	6181.53	4.27326	-0.00003
18.4999	34.8223	4.61907	6381.10	4.61909	0.00002
24.0000	34.8124	5.17811	6690.93	5.17811	0.00000
29.0000	34.8073	5.70101	6968.06	5.70102	0.00001
32.5000	34.8048	6.07421	7159.14	6.07420	-0.00001

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

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

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

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

