

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: 1242
CALIBRATION DATE: 10-Dec-09

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

COEFFICIENTS:

g = -1.053578e+000
h = 1.540206e-001
i = -8.827162e-005
j = 3.250063e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8400e-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	2616.32	0.00000	0.00000
1.0000	34.8076	2.97529	5108.00	2.97531	0.00002
4.5000	34.7880	3.28232	5298.50	3.28229	-0.00002
15.0000	34.7451	4.26380	5865.65	4.26380	0.00000
18.4999	34.7356	4.60881	6052.19	4.60881	0.00000
24.0000	34.7245	5.16648	6341.91	5.16649	0.00001
29.0000	34.7173	5.68793	6601.07	5.68792	-0.00001

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

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

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

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

