

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: 2448
CALIBRATION DATE: 15-Dec-10

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

COEFFICIENTS:

g = -1.029572e+000
h = 1.465899e-001
i = -1.537454e-004
j = 3.534523e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 7.2604e-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	2651.41	0.00000	0.00000
1.0000	34.7633	2.97187	5221.77	2.97189	0.00003
4.5001	34.7432	3.27852	5417.29	3.27849	-0.00002
15.0000	34.6995	4.25880	5998.95	4.25878	-0.00002
18.5001	34.6898	4.60341	6190.17	4.60340	-0.00001
24.0000	34.6791	5.16047	6487.05	5.16051	0.00004
29.0001	34.6722	5.68138	6752.48	5.68138	-0.00000
32.5000	34.6676	6.05299	6935.44	6.05297	-0.00001

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

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

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

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

