

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: 3762
CALIBRATION DATE: 20-Jan-11

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

COEFFICIENTS:

g = -1.043356e+000
h = 1.312465e-001
i = -5.640428e-005
j = 2.327875e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.1560e-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	2819.47	0.00000	0.00000
1.0000	34.7751	2.97278	5523.37	2.97278	0.00000
4.4999	34.7517	3.27922	5729.40	3.27921	-0.00001
15.0000	34.7037	4.25926	6342.80	4.25926	-0.00000
18.5000	34.6921	4.60367	6544.46	4.60369	0.00002
24.0000	34.6814	5.16077	6857.80	5.16077	-0.00001
29.0000	34.6751	5.68179	7138.11	5.68178	-0.00001
32.5001	34.6710	6.05352	7331.39	6.05353	0.00001

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

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

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

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

