

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: 0475
CALIBRATION DATE: 01-Dec-10

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

COEFFICIENTS:

g = -1.041438e+000
h = 1.409639e-001
i = -3.246037e-004
j = 4.684387e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.3216e-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	2725.77	0.00000	0.00000
0.9999	34.8412	2.97788	5347.51	2.97787	-0.00001
4.4999	34.8208	3.28510	5548.24	3.28512	0.00002
15.0000	34.7770	4.26730	6145.68	4.26728	-0.00002
18.5000	34.7674	4.61258	6342.22	4.61259	0.00001
24.0000	34.7564	5.17070	6647.42	5.17070	-0.00000
29.0000	34.7486	5.69248	6920.40	5.69250	0.00002
32.5000	34.7441	6.06482	7108.65	6.06481	-0.00001

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

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

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

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

