

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0811
CALIBRATION DATE: 09-Nov-06

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

COEFFICIENTS:

g = -1.082237e+000
h = 1.506130e-001
i = -3.818377e-004
j = 5.133346e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.3368e-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	2688.61	0.00000	0.00000
1.0000	34.8149	2.97586	5201.27	2.97586	0.00000
4.5000	34.7950	3.28291	5394.61	3.28291	-0.00000
15.0000	34.7523	4.26459	5970.56	4.26459	-0.00000
18.5000	34.7434	4.60974	6160.14	4.60973	-0.00001
23.9999	34.7339	5.16771	6454.71	5.16772	0.00001
28.9999	34.7287	5.68957	6718.35	5.68958	0.00001
32.5000	34.7258	6.06199	6900.22	6.06198	-0.00001

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

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

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

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

