

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0823
CALIBRATION DATE: 07-Dec-07

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

COEFFICIENTS:

g = -1.033344e+000
h = 1.557586e-001
i = -2.610844e-004
j = 4.755900e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.7202e-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	2579.44	0.00000	0.00000
1.0000	34.7346	2.96965	5071.23	2.96964	-0.00000
4.5000	34.7139	3.27601	5261.26	3.27603	0.00001
15.0000	34.6706	4.25563	5826.75	4.25561	-0.00002
18.5000	34.6618	4.60008	6012.74	4.60008	-0.00000
24.0000	34.6525	5.15695	6301.55	5.15694	-0.00000
29.0000	34.6477	5.67780	6559.92	5.67784	0.00003
32.5000	34.6451	6.04950	6738.04	6.04948	-0.00002

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

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

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

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

