

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0825
CALIBRATION DATE: 12-Dec-07

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

COEFFICIENTS:

g = -9.211015e-001
h = 1.418332e-001
i = -2.549129e-004
j = 4.744000e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.9023e-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	2552.27	0.00000	0.00000
1.0000	34.7864	2.97365	5240.95	2.97368	0.00003
4.5000	34.7658	3.28043	5442.74	3.28041	-0.00001
15.0000	34.7227	4.26134	6042.08	4.26128	-0.00006
18.5000	34.7137	4.60623	6238.86	4.60623	0.00000
24.0000	34.7041	5.16378	6544.11	5.16384	0.00007
29.0000	34.6985	5.68519	6816.77	5.68519	-0.00000
32.5001	34.6948	6.05721	7004.61	6.05718	-0.00002

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

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

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

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

