

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3318
CALIBRATION DATE: 20-Jun-06

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

COEFFICIENTS:

g = -1.019348e+000
h = 1.393737e-001
i = -2.111904e-004
j = 4.018199e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -5.6324e-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	2707.26	0.00000	0.00000
1.0000	34.8017	2.97484	5352.95	2.97485	0.00001
4.5000	34.7819	3.28180	5553.99	3.28179	-0.00001
15.0000	34.7398	4.26322	6151.96	4.26320	-0.00002
18.5000	34.7311	4.60828	6348.51	4.60828	-0.00001
23.9999	34.7220	5.16614	6653.64	5.16616	0.00002
28.9999	34.7175	5.68794	6926.50	5.68796	0.00002
32.5001	34.7153	6.06038	7114.60	6.06036	-0.00002

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

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

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

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

