

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4303
CALIBRATION DATE: 01-Feb-08

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

COEFFICIENTS:

g = -1.018239e+000
h = 1.380734e-001
i = -1.323471e-004
j = 3.199321e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.0412e-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	2717.02	0.00000	0.00000
1.0000	34.8569	2.97910	5376.47	2.97910	-0.00001
4.5000	34.8365	3.28644	5578.54	3.28647	0.00002
14.9999	34.7928	4.26903	6179.50	4.26899	-0.00004
18.5000	34.7831	4.61444	6377.04	4.61442	-0.00002
23.9998	34.7721	5.17276	6683.71	5.17280	0.00004
29.0000	34.7645	5.69479	6957.85	5.69480	0.00001
32.5000	34.7591	6.06714	7146.75	6.06712	-0.00002

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

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

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

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

