

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1245
CALIBRATION DATE: 04-Jun-08

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

COEFFICIENTS:

g = -1.055102e+000
h = 1.621947e-001
i = 1.559899e-004
j = 1.882215e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -3.0022e-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	2547.29	0.00000	0.00000
0.9999	34.6703	2.96466	4959.53	2.96468	0.00001
4.4999	34.6508	3.27064	5144.09	3.27062	-0.00002
14.9999	34.6087	4.24882	5693.65	4.24883	0.00001
18.4999	34.5995	4.59269	5874.45	4.59270	0.00001
23.9999	34.5892	5.14855	6155.29	5.14855	-0.00000
29.0000	34.5828	5.66836	6406.58	5.66835	-0.00002
32.5000	34.5792	6.03930	6579.94	6.03931	0.00001

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

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

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

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

