

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0416
CALIBRATION DATE: 04-Jun-08

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

COEFFICIENTS:

g = -9.665228e-001
h = 1.381091e-001
i = -2.685617e-004
j = 4.182652e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.4403e-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	2651.90	0.00000	0.00000
0.9999	34.6703	2.96466	5340.10	2.96466	-0.00000
4.4999	34.6508	3.27064	5544.11	3.27065	0.00001
14.9999	34.6087	4.24882	6150.69	4.24880	-0.00002
18.4999	34.5995	4.59269	6350.05	4.59269	-0.00000
23.9999	34.5892	5.14855	6659.53	5.14857	0.00002
29.0000	34.5828	5.66836	6936.25	5.66837	0.00001
32.5000	34.5792	6.03930	7127.03	6.03929	-0.00001

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

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

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

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

