

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4303
CALIBRATION DATE: 02-Dec-10

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

COEFFICIENTS:

g = -1.021236e+000
h = 1.386478e-001
i = -2.684017e-004
j = 4.083440e-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	2718.36	0.00000	0.00000
0.9999	34.6602	2.96388	5366.36	2.96388	-0.00000
4.4999	34.6398	3.26970	5567.84	3.26971	0.00001
15.0000	34.5962	4.24746	6167.14	4.24746	0.00000
18.5000	34.5863	4.59114	6364.10	4.59113	-0.00001
24.0000	34.5754	5.14674	6669.90	5.14674	0.00001
29.0000	34.5692	5.66638	6943.37	5.66638	-0.00000
32.5000	34.5656	6.03720	7131.90	6.03720	0.00000

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

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

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

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

