

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1251
CALIBRATION DATE: 02-Dec-10

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

COEFFICIENTS:

g = -1.032393e+000
h = 1.510695e-001
i = -1.138242e-004
j = 3.479475e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8251e-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	2615.50	0.00000	0.00000
0.9999	34.6602	2.96388	5137.68	2.96389	0.00000
4.4999	34.6398	3.26970	5330.08	3.26971	0.00001
15.0000	34.5962	4.24746	5902.65	4.24743	-0.00003
18.5000	34.5863	4.59114	6090.93	4.59114	-0.00000
24.0000	34.5754	5.14674	6383.33	5.14676	0.00003
29.0000	34.5692	5.66638	6644.89	5.66639	0.00000
32.5000	34.5656	6.03720	6825.26	6.03719	-0.00001

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

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

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

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

