

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3722
CALIBRATION DATE: 02-Dec-10

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

COEFFICIENTS:

g = -1.042092e+000
h = 1.259841e-001
i = -1.847408e-004
j = 2.949178e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.4820e-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	2879.06	0.00000	0.00000
1.0000	34.6559	2.96356	5641.01	2.96357	0.00001
4.5000	34.6360	3.26938	5851.56	3.26938	-0.00001
15.0000	34.5927	4.24708	6478.06	4.24705	-0.00002
18.5000	34.5835	4.59081	6684.09	4.59081	0.00000
24.0000	34.5732	5.14645	7003.96	5.14648	0.00003
29.0000	34.5673	5.66611	7290.01	5.66609	-0.00002
32.5000	34.5632	6.03683	7487.21	6.03683	-0.00000

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

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

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

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

