

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0817
CALIBRATION DATE: 21-Jul-07

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

COEFFICIENTS:

g = -1.092395e+000
h = 1.391816e-001
i = -7.106214e-005
j = 2.523423e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -1.3113e-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	2801.97	0.00000	0.00000
1.0000	34.7314	2.96940	5395.41	2.96940	0.00000
4.5000	34.7117	3.27583	5594.55	3.27582	-0.00001
15.0000	34.6689	4.25544	6187.71	4.25545	0.00001
18.5000	34.6598	4.59984	6382.93	4.59985	0.00001
24.0000	34.6497	5.15658	6686.20	5.15656	-0.00001
29.0000	34.6436	5.67721	6957.60	5.67720	-0.00000
32.5000	34.6382	6.04844	7144.67	6.04844	0.00000

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

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

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

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

