

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4590
CALIBRATION DATE: 16-Jul-09

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

COEFFICIENTS:

g = -1.012013e+000
h = 1.409269e-001
i = -1.272963e-004
j = 3.285515e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.8062e-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	2680.96	0.00000	0.00000
1.0000	34.7935	2.97420	5313.72	2.97421	0.00001
4.4999	34.7742	3.28113	5513.70	3.28113	-0.00000
14.9999	34.7318	4.26233	6108.41	4.26232	-0.00001
18.5000	34.7227	4.60729	6303.89	4.60729	-0.00000
24.0000	34.7127	5.16492	6607.35	5.16492	0.00001
29.0001	34.7074	5.68650	6878.75	5.68652	0.00002
32.5000	34.7051	6.05879	7065.88	6.05877	-0.00002

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

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

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

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

