

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0810
CALIBRATION DATE: 01-May-12

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

COEFFICIENTS:

g = -1.086185e+000
h = 1.524508e-001
i = -4.959559e-004
j = 6.003676e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.1529e-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	2679.24	0.00000	0.00000
1.0000	34.9217	2.98411	5183.61	2.98411	-0.00001
4.5000	34.9015	3.29197	5376.30	3.29197	0.00000
15.0000	34.8586	4.27625	5950.29	4.27626	0.00001
18.5000	34.8496	4.62231	6139.21	4.62232	0.00001
24.0000	34.8398	5.18173	6432.70	5.18171	-0.00002
29.0000	34.8346	5.70498	6695.40	5.70498	0.00000
32.5000	34.8323	6.07846	6876.65	6.07847	0.00001

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

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

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

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

