

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3766
CALIBRATION DATE: 16-Dec-11

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

COEFFICIENTS:

g = -1.047916e+000
h = 1.347877e-001
i = -1.389788e-004
j = 2.958164e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -1.0064e-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	2790.23	0.00000	0.00000
1.0000	34.9723	2.98802	5469.49	2.98798	-0.00004
4.4999	34.9522	3.29627	5673.88	3.29632	0.00006
14.9999	34.9087	4.28174	6281.91	4.28173	-0.00000
18.5000	34.8988	4.62813	6481.84	4.62811	-0.00002
24.0000	34.8877	5.18807	6792.31	5.18808	0.00001
29.0000	34.8795	5.71150	7069.89	5.71149	-0.00001
32.5000	34.8727	6.08471	7261.16	6.08472	0.00001

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

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

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

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

