

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0039
CALIBRATION DATE: 07-Feb-15

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

COEFFICIENTS:

g = -9.898617e-001
h = 1.443763e-001
i = -3.750954e-004
j = 4.743299e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -3.3659e-007

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	2624.41	0.00000	0.00000
1.0000	34.9281	2.98461	5258.83	2.98462	0.00002
4.5000	34.9067	3.29241	5458.17	3.29239	-0.00002
15.0000	34.8601	4.27642	6050.85	4.27642	-0.00000
18.5000	34.8488	4.62221	6245.52	4.62222	0.00001
24.0000	34.8362	5.18126	6547.66	5.18125	-0.00000
29.0000	34.8267	5.70383	6817.66	5.70383	-0.00000
32.5000	34.8211	6.07673	7003.73	6.07667	-0.00006

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

$$\text{Conductivity} = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p) \text{ Siemens / meter}$$

t = temperatur e[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

