

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0047
CALIBRATION DATE: 11-Nov-09

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

COEFFICIENTS:

g = -1.010077e+000	CPcor = -9.5700e-008
h = 1.471482e-001	CTcor = 3.2500e-006
i = -8.273203e-005	WBOTC = 2.0353e-006
j = 2.866669e-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	2620.11	0.00000	0.00000
1.0000	34.8804	2.98092	5201.82	2.98093	0.00001
4.4999	34.8602	3.28845	5397.71	3.28844	-0.00001
14.9999	34.8170	4.27168	5980.42	4.27167	-0.00001
18.5000	34.8072	4.61729	6171.94	4.61729	-0.00000
24.0000	34.7963	5.17598	6469.27	5.17599	0.00001
29.0000	34.7893	5.69839	6735.12	5.69840	0.00001
32.5000	34.7843	6.07104	6918.33	6.07103	-0.00001

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

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

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

Residual = instrument conductivity - bath conductivity

