

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0039
CALIBRATION DATE: 20-Mar-12

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

COEFFICIENTS:

g = -9.890327e-001	CPcor = -9.5700e-008
h = 1.443269e-001	CTcor = 3.2500e-006
i = -3.906394e-004	WBOTC = -3.3659e-007
j = 4.924786e-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	2624.02	0.00000	0.00000
1.0000	34.9814	2.98873	5262.47	2.98873	0.00000
4.5000	34.9605	3.29698	5462.08	3.29698	-0.00000
15.0000	34.9154	4.28248	6055.46	4.28248	-0.00000
18.5000	34.9052	4.62889	6250.38	4.62889	0.00000
24.0000	34.8932	5.18880	6552.87	5.18880	0.00001
29.0000	34.8840	5.71216	6823.12	5.71215	-0.00001
32.5000	34.8754	6.08513	7009.16	6.08513	0.00000

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

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

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

Residual = instrument conductivity - bath conductivity

