

SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0092
CALIBRATION DATE: 03-Apr-10

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

COEFFICIENTS:

g = -1.001875e+000	CPcor = -9.5700e-008
h = 1.373957e-001	CTcor = 3.2500e-006
i = -5.174863e-004	WBOTC = -3.6895e-007
j = 5.803924e-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	2710.00	0.00000	0.00000
1.0000	34.6742	2.96497	5394.97	2.96502	0.00005
4.5000	34.6544	3.27095	5598.64	3.27092	-0.00003
15.0000	34.6114	4.24913	6204.26	4.24905	-0.00008
18.5000	34.6018	4.59297	6403.26	4.59297	0.00000
24.0000	34.5912	5.14883	6712.07	5.14892	0.00009
29.0000	34.5847	5.66864	6987.99	5.66864	0.00000
32.5001	34.5802	6.03947	7178.11	6.03943	-0.00003

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

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

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

Residual = instrument conductivity - bath conductivity

