

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: 0829
CALIBRATION DATE: 07-Jul-10

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

COEFFICIENTS:

g = -1.045930e+000
h = 1.579757e-001
i = -4.948040e-005
j = 3.299099e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8423e-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	2573.16	0.00000	0.00000
0.9999	34.6588	2.96377	5028.80	2.96377	-0.00000
4.5000	34.6390	3.26964	5216.48	3.26965	0.00001
15.0000	34.5960	4.24744	5775.03	4.24740	-0.00004
18.5000	34.5867	4.59119	5958.78	4.59119	0.00000
24.0000	34.5767	5.14691	6244.17	5.14694	0.00003
29.0000	34.5708	5.66662	6499.47	5.66663	0.00001
32.5000	34.5676	6.03751	6675.55	6.03749	-0.00002

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

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

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

Residual = instrument conductivity - bath conductivity

