

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

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

SENSOR SERIAL NUMBER: 1242
CALIBRATION DATE: 04-Jun-08

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

COEFFICIENTS:

g = -1.051890e+000
h = 1.535939e-001
i = -8.715289e-006
j = 2.671801e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8400e-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	2616.42	0.00000	0.00000
0.9999	34.6703	2.96466	5103.03	2.96467	0.00001
4.4999	34.6508	3.27064	5293.23	3.27063	-0.00001
14.9999	34.6087	4.24882	5859.49	4.24881	-0.00001
18.4999	34.5995	4.59269	6045.78	4.59270	0.00001
23.9999	34.5892	5.14855	6335.11	5.14855	-0.00000
29.0000	34.5828	5.66836	6593.99	5.66838	0.00002
32.5000	34.5792	6.03930	6772.53	6.03929	-0.00001

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

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

