

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: 0814
CALIBRATION DATE: 21-Jul-07

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

COEFFICIENTS:

g = -1.074329e+000

CPcor = -9.5700e-008

h = 1.549627e-001

CTcor = 3.2500e-006

i = -6.432355e-004

WBOTC = -7.7537e-005

j = 7.551994e-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	2645.30	0.00000	0.00000
1.0000	34.7314	2.96940	5130.31	2.96944	0.00004
4.5000	34.7117	3.27583	5321.38	3.27582	-0.00000
15.0000	34.6689	4.25544	5890.38	4.25536	-0.00008
18.5000	34.6598	4.59984	6077.64	4.59980	-0.00004
24.0000	34.6497	5.15658	6368.54	5.15668	0.00010
29.0000	34.6436	5.67721	6628.70	5.67727	0.00006
32.5000	34.6382	6.04844	6807.94	6.04837	-0.00007

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

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

