

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: 0822
CALIBRATION DATE: 07-Dec-07

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

COEFFICIENTS:

g = -1.035621e+000

CPcor = -9.5700e-008

h = 1.594023e-001

CTcor = 3.2500e-006

i = -2.709785e-004

WBOTC = -2.8737e-005

j = 5.020533e-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	2552.63	0.00000	0.00000
1.0000	34.7346	2.96965	5014.26	2.96965	0.00000
4.5000	34.7139	3.27601	5202.04	3.27601	-0.00000
15.0000	34.6706	4.25563	5760.91	4.25562	-0.00000
18.5000	34.6618	4.60008	5944.71	4.60007	-0.00001
24.0000	34.6525	5.15695	6230.16	5.15697	0.00002
29.0000	34.6477	5.67780	6485.48	5.67780	-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

