

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2003
CALIBRATION DATE: 09-Nov-06

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

COEFFICIENTS:

g = -9.696645e-001
h = 1.352231e-001
i = -3.835620e-004
j = 5.026358e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.6935e-006

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	2684.22	0.00000	0.00000
1.0000	34.8149	2.97586	5413.74	2.97588	0.00002
4.5000	34.7950	3.28291	5619.63	3.28289	-0.00002
15.0000	34.7523	4.26459	6231.40	4.26455	-0.00004
18.5000	34.7434	4.60974	6432.33	4.60976	0.00002
23.9999	34.7339	5.16771	6744.06	5.16782	0.00011
28.9999	34.7287	5.68957	7022.47	5.68944	-0.00013
32.5000	34.7258	6.06199	7214.49	6.06205	0.00005

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

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

