

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2003
CALIBRATION DATE: 11-Dec-08

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

COEFFICIENTS:

g = -9.668071e-001

CPcor = -9.5700e-008

h = 1.346959e-001

CTcor = 3.2500e-006

i = -3.162798e-004

WBOTC = 8.6935e-006

j = 4.468472e-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	2684.12	0.00000	0.00000
1.0000	34.8847	2.98125	5422.04	2.98129	0.00003
4.5000	34.8645	3.28882	5628.42	3.28881	-0.00001
15.0000	34.8211	4.27214	6241.65	4.27209	-0.00005
18.5000	34.8117	4.61782	6443.02	4.61780	-0.00003
24.0000	34.8013	5.17664	6755.49	5.17671	0.00007
29.0000	34.7950	5.69922	7034.65	5.69927	0.00004
32.4999	34.7909	6.07205	7226.91	6.07200	-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]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

