

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2003
CALIBRATION DATE: 14-Apr-12

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

COEFFICIENTS:

g = -9.668879e-001

CPcor = -9.5700e-008

h = 1.348108e-001

CTcor = 3.2500e-006

i = -3.643397e-004

WBOTC = 8.6935e-006

j = 4.842849e-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	2684.11	0.00000	0.00000
1.0000	34.8466	2.97831	5420.79	2.97833	0.00002
4.5000	34.8260	3.28555	5627.08	3.28552	-0.00003
15.0000	34.7817	4.26782	6240.05	4.26778	-0.00003
18.4999	34.7722	4.61314	6441.36	4.61318	0.00004
24.0000	34.7619	5.17143	6753.63	5.17144	0.00001
29.0000	34.7559	5.69354	7032.65	5.69350	-0.00003
32.5000	34.7530	6.06620	7224.99	6.06621	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]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

