

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0811
CALIBRATION DATE: 14-Apr-12

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

COEFFICIENTS:

g = -1.085361e+000
h = 1.512592e-001
i = -4.856465e-004
j = 5.769654e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.3368e-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	2688.78	0.00000	0.00000
1.0000	34.8466	2.97831	5200.02	2.97831	0.00000
4.5000	34.8260	3.28555	5393.30	3.28555	0.00000
15.0000	34.7817	4.26782	5969.07	4.26780	-0.00002
18.4999	34.7722	4.61314	6158.60	4.61315	0.00001
24.0000	34.7619	5.17143	6453.07	5.17143	0.00001
29.0000	34.7559	5.69354	6716.60	5.69353	-0.00000

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

$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

