

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0811

CALIBRATION DATE: 11-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.080965e+000

h = 1.503320e-001

i = -3.447466e-004

j = 4.785833e-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	2688.88	0.00000	0.00000
0.9999	34.6864	2.96591	5197.23	2.96590	-0.00001
4.5000	34.6660	3.27194	5390.33	3.27195	0.00001
14.9999	34.6219	4.25027	5965.52	4.25028	0.00001
18.4999	34.6114	4.59410	6154.79	4.59410	-0.00000
23.9999	34.5988	5.14983	6448.84	5.14983	0.00000
29.0001	34.5908	5.66954	6712.01	5.66952	-0.00002
32.5000	34.5845	6.04012	6893.46	6.04014	0.00001

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

Conductivity = $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$ Siemens / meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

