

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1806
CALIBRATION DATE: 05-Feb-14

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

COEFFICIENTS:

g = -9.977038e-001

CPcor = -9.5700e-008

h = 1.358471e-001

CTcor = 3.2500e-006

i = -1.655599e-004

WBOTC = 1.9667e-006

j = 3.590804e-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	2711.83	0.00000	0.00000
1.0000	34.6873	2.96599	5398.59	2.96598	-0.00001
4.5000	34.6678	3.27209	5602.23	3.27210	0.00001
15.0000	34.6263	4.25076	6207.60	4.25074	-0.00002
18.5000	34.6176	4.59485	6406.54	4.59486	0.00001
24.0000	34.6081	5.15107	6715.27	5.15108	0.00001
29.0000	34.6024	5.67121	6991.23	5.67120	-0.00001
32.5000	34.5986	6.04231	7181.42	6.04231	0.00000

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

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

