

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1852  
CALIBRATION DATE: 06-Feb-14

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

## COEFFICIENTS:

g = -1.054409e+000

CPcor = -9.5700e-008

h = 1.504071e-001

CTcor = 3.2500e-006

i = -2.045321e-004

WBOTC = 1.0378e-006

j = 4.148214e-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	2649.89	0.00000	0.00000
1.0000	34.6850	2.96581	5169.10	2.96578	-0.00003
4.5000	34.6651	3.27186	5361.52	3.27190	0.00004
15.0000	34.6223	4.25033	5933.98	4.25032	-0.00001
18.5000	34.6129	4.59429	6122.23	4.59428	-0.00000
24.0000	34.6024	5.15031	6414.55	5.15031	-0.00000
29.0000	34.5961	5.67030	6676.00	5.67030	0.00000
32.5000	34.5917	6.04124	6856.22	6.04124	-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];  $\delta = \text{CTcor}$ ;  $\epsilon = \text{CPcor}$ ;

Residual = instrument conductivity - bath conductivity

