

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1678  
CALIBRATION DATE: 08-Feb-14

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

## COEFFICIENTS:

g = -9.838852e-001

CPcor = -9.5700e-008

h = 1.371671e-001

CTcor = 3.2500e-006

i = -1.735777e-004

WBOTC = 4.8508e-006

j = 3.678185e-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	2680.05	0.00000	0.00000
1.0000	34.8344	2.97736	5371.40	2.97737	0.00001
4.5000	34.8146	3.28458	5574.82	3.28457	-0.00001
15.0000	34.7728	4.26684	6179.48	4.26683	-0.00002
18.5000	34.7640	4.61218	6378.11	4.61218	0.00000
24.0000	34.7546	5.17046	6686.37	5.17047	0.00001
29.0000	34.7495	5.69261	6961.92	5.69261	0.00001
32.5000	34.7463	6.06516	7151.78	6.06515	-0.00001

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

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

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

Residual = instrument conductivity - bath conductivity

