

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2318  
CALIBRATION DATE: 10-Dec-11

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

## COEFFICIENTS:

g = -9.722048e-001  
h = 1.449219e-001  
i = -1.449430e-004  
j = 3.464142e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = 6.0140e-006

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	2591.18	0.00000	0.00000
1.0000	34.8490	2.97849	5217.83	2.97850	0.00001
4.5000	34.8279	3.28571	5416.04	3.28570	-0.00001
15.0000	34.7821	4.26786	6005.14	4.26786	-0.00001
18.5000	34.7708	4.61298	6198.57	4.61299	0.00000
24.0000	34.7580	5.17091	6498.77	5.17092	0.00001
29.0000	34.7478	5.69236	6766.95	5.69236	-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];  $\delta$  = CTcor;  $\epsilon$  = CPcor;

Residual = instrument conductivity - bath conductivity

