

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2337  
CALIBRATION DATE: 06-Feb-14

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

## COEFFICIENTS:

g = -1.061187e+000  
h = 1.494938e-001  
i = -1.515790e-004  
j = 3.791689e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -5.6580e-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	2665.68	0.00000	0.00000
1.0000	34.6850	2.96581	5186.10	2.96579	-0.00002
4.5000	34.6651	3.27186	5378.80	3.27188	0.00002
15.0000	34.6223	4.25033	5952.30	4.25033	0.00001
18.5000	34.6129	4.59429	6140.91	4.59429	-0.00000
24.0000	34.6024	5.15031	6433.82	5.15031	-0.00001
29.0000	34.5961	5.67030	6695.82	5.67029	-0.00001
32.5000	34.5917	6.04124	6876.45	6.04125	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

