

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2331  
CALIBRATION DATE: 17-Dec-11

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

## COEFFICIENTS:

g = -9.658510e-001

CPcor = -9.5700e-008

h = 1.371035e-001

CTcor = 3.2500e-006

i = -2.837709e-004

WBOTC = -4.4193e-006

j = 4.567687e-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	2658.50	0.00000	0.00000
1.0000	34.9710	2.98792	5374.15	2.98793	0.00001
4.5000	34.9508	3.29616	5578.88	3.29619	0.00003
15.0000	34.9065	4.28150	6186.92	4.28136	-0.00015
18.5000	34.8961	4.62781	6386.67	4.62788	0.00007
24.0000	34.8842	5.18761	6696.41	5.18771	0.00010
29.0000	34.8742	5.71073	6972.90	5.71068	-0.00006

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

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

