

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2341  
CALIBRATION DATE: 21-Jan-11

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

## COEFFICIENTS:

g = -1.029814e+000  
h = 1.544127e-001  
i = -1.049589e-004  
j = 3.536866e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = 4.0978e-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	2582.66	0.00000	0.00000
0.9999	34.7447	2.97042	5083.56	2.97044	0.00002
4.5000	34.7239	3.27686	5273.79	3.27685	-0.00002
14.9999	34.6793	4.25657	5839.82	4.25655	-0.00002
18.5000	34.6695	4.60099	6025.93	4.60100	0.00001
23.9999	34.6591	5.15781	6314.88	5.15782	0.00001
28.9999	34.6530	5.67856	6573.29	5.67857	0.00000
32.5001	34.6463	6.04970	6751.24	6.04969	-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

