

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 6353  
CALIBRATION DATE: 22-Oct-10

SBE19plus CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

## COEFFICIENTS:

g = -1.012062e+000  
h = 1.503779e-001  
i = -2.119117e-004  
j = 3.743850e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-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	2596.82	0.0000	0.00000
1.0000	34.8490	2.97849	5153.08	2.9785	0.00000
4.5000	34.8287	3.28578	5347.19	3.2858	-0.00000
15.0000	34.7850	4.26818	5924.60	4.2682	-0.00000
18.5000	34.7756	4.61355	6114.40	4.6135	-0.00000
24.0000	34.7649	5.17182	6409.06	5.1718	0.00001
29.0000	34.7587	5.69395	6672.56	5.6939	-0.00001
32.5000	34.7546	6.06645	6854.20	6.0664	0.00000

f = INST FREQ / 1000.0

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

