

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1678
CALIBRATION DATE: 21-Dec-10

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

COEFFICIENTS:

g = -9.834975e-001
h = 1.370231e-001
i = -1.320276e-004
j = 3.362055e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 4.8508e-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	2680.06	0.00000	0.00000
1.0000	34.8587	2.97924	5372.64	2.97926	0.00001
4.5000	34.8384	3.28660	5576.10	3.28660	-0.00000
15.0000	34.7943	4.26920	6180.80	4.26918	-0.00002
18.5000	34.7846	4.61462	6379.44	4.61461	-0.00001
23.9999	34.7730	5.17289	6687.67	5.17293	0.00005
29.0000	34.7660	5.69501	6963.14	5.69499	-0.00001
32.5000	34.7603	6.06733	7152.90	6.06732	-0.00000

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

$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

