

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3936
CALIBRATION DATE: 21-Nov-06

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

COEFFICIENTS:

g = -1.018571e+000
h = 1.418389e-001
i = -1.744801e-004
j = 3.744327e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 7.1795e-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	2681.44	0.00000	0.00000
0.9999	34.8598	2.97932	5306.65	2.97933	0.00001
4.5000	34.8397	3.28671	5505.94	3.28671	-0.00001
15.0000	34.7972	4.26952	6098.65	4.26950	-0.00002
18.5000	34.7883	4.61506	6293.46	4.61505	-0.00000
24.0000	34.7784	5.17361	6595.85	5.17363	0.00002
29.0000	34.7725	5.69595	6866.18	5.69596	0.00001
32.5000	34.7685	6.06860	7052.48	6.06858	-0.00002

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

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

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

