

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3764
CALIBRATION DATE: 22-Dec-10

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

COEFFICIENTS:

g = -1.042629e+000
h = 1.635125e-001
i = -3.460173e-004
j = 4.975885e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 9.4902e-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	2529.21	0.00000	0.00000
1.0000	34.6579	2.96371	4957.38	2.96371	-0.00000
4.5000	34.6377	3.26953	5142.59	3.26953	0.00000
15.0000	34.5951	4.24734	5693.81	4.24733	-0.00001
18.5000	34.5859	4.59109	5875.08	4.59110	0.00000
24.0000	34.5753	5.14672	6156.53	5.14672	-0.00000
29.0000	34.5677	5.66617	6408.19	5.66617	0.00000
32.5001	34.5615	6.03657	6581.59	6.03657	-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]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

