

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0477
CALIBRATION DATE: 17-Nov-06

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

COEFFICIENTS:

g = -1.071608e+000
h = 1.467325e-001
i = -4.965009e-004
j = 5.609619e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.5093e-005

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	2713.01	0.00000	0.00000
1.0000	34.7225	2.96871	5266.62	2.96871	-0.00000
4.5000	34.7014	3.27495	5462.84	3.27497	0.00002
14.9999	34.6566	4.25408	6047.24	4.25406	-0.00002
18.5000	34.6463	4.59824	6239.54	4.59823	-0.00001
24.0000	34.6348	5.15460	6538.28	5.15462	0.00001
29.0000	34.6278	5.67491	6805.60	5.67494	0.00003
32.5000	34.6245	6.04632	6990.01	6.04629	-0.00003

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

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

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

Residual = instrument conductivity - bath conductivity

