

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0812
CALIBRATION DATE: 09-Nov-06

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

COEFFICIENTS:

g = -1.098638e+000

CPcor = -9.5700e-008

h = 1.547128e-001

CTcor = 3.2500e-006

i = -4.060084e-004

WBOTC = -8.0013e-005

j = 5.623928e-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	2673.05	0.00000	0.00000
1.0000	34.8149	2.97586	5142.05	2.97585	-0.00000
4.5000	34.7950	3.28291	5332.46	3.28292	0.00001
15.0000	34.7523	4.26459	5899.78	4.26459	-0.00000
18.5000	34.7434	4.60974	6086.56	4.60973	-0.00001
23.9999	34.7339	5.16771	6376.80	5.16771	0.00000
28.9999	34.7287	5.68957	6636.60	5.68958	0.00001
32.5000	34.7258	6.06199	6815.83	6.06198	-0.00001

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

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

