

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0826
CALIBRATION DATE: 31-May-07

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

COEFFICIENTS:

g = -1.060078e+000

CPcor = -9.5700e-008

h = 1.565880e-001

CTcor = 3.2500e-006

i = -1.516010e-004

WBOTC = -2.7407e-005

j = 3.888149e-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	2603.77	0.00000	0.00000
1.0001	34.7923	2.97412	5072.09	2.97415	0.00003
4.5000	34.7718	3.28094	5260.88	3.28091	-0.00003
15.0000	34.7279	4.26192	5823.07	4.26189	-0.00002
18.5000	34.7186	4.60681	6008.03	4.60680	-0.00000
24.0000	34.7087	5.16439	6295.33	5.16441	0.00002
29.0000	34.7036	5.68593	6552.41	5.68596	0.00003
32.5000	34.7011	6.05817	6729.71	6.05814	-0.00003

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

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

