

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3533
CALIBRATION DATE: 19-Jul-07

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

COEFFICIENTS:

g = -1.025978e+000

CPcor = -9.5700e-008

h = 1.385276e-001

CTcor = 3.2500e-006

i = -8.534521e-005

WBOTC = -1.1937e-005

j = 2.817494e-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	2722.04	0.00000	0.00000
0.9999	34.8112	2.97556	5367.78	2.97556	-0.00000
4.5000	34.7912	3.28259	5569.15	3.28260	0.00001
15.0000	34.7485	4.26418	6168.22	4.26417	-0.00001
18.4999	34.7396	4.60928	6365.20	4.60928	0.00000
23.9999	34.7298	5.16717	6671.05	5.16717	0.00001
29.0000	34.7246	5.68899	6944.63	5.68898	-0.00000
32.5001	34.7216	6.06135	7133.27	6.06135	0.00000

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

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

