

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1863
CALIBRATION DATE: 21-Dec-10

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

COEFFICIENTS:

g = -1.004364e+000
h = 1.399819e-001
i = -6.605315e-005
j = 2.920822e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 2.1158e-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	2678.24	0.00000	0.00000
1.0000	34.8587	2.97924	5325.55	2.97925	0.00001
4.5000	34.8384	3.28660	5526.19	3.28660	-0.00001
15.0000	34.7943	4.26920	6122.78	4.26919	-0.00001
18.5000	34.7846	4.61462	6318.82	4.61461	-0.00000
23.9999	34.7730	5.17289	6623.09	5.17291	0.00003
29.0000	34.7660	5.69501	6895.12	5.69499	-0.00002
32.5000	34.7603	6.06733	7082.54	6.06733	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

