

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1852
CALIBRATION DATE: 19-Jan-11

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

COEFFICIENTS:

g = -1.051452e+000
h = 1.497552e-001
i = -8.112802e-005
j = 3.199604e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.0378e-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	2649.63	0.00000	0.00000
1.0000	34.7907	2.97399	5177.06	2.97400	0.00001
4.5000	34.7706	3.28084	5369.86	3.28082	-0.00002
15.0000	34.7270	4.26182	5943.70	4.26180	-0.00001
18.5000	34.7176	4.60669	6132.42	4.60671	0.00002
23.9999	34.7076	5.16423	6425.48	5.16424	0.00001
29.0000	34.7015	5.68563	6687.60	5.68561	-0.00002
32.4999	34.6968	6.05749	6868.28	6.05750	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]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

