

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0819
CALIBRATION DATE: 12-Jun-09

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

COEFFICIENTS:

g = -1.094125e+000
h = 1.555799e-001
i = -3.428817e-004
j = 5.073526e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.4742e-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	2658.81	0.00000	0.00000
0.9999	34.5767	2.95742	5110.27	2.95735	-0.00007
4.4999	34.5537	3.26237	5299.32	3.26246	0.00009
15.0001	34.5082	4.23781	5862.61	4.23781	0.00000
18.5000	34.4972	4.58058	6047.99	4.58056	-0.00002
24.0001	34.4853	5.13481	6336.15	5.13480	-0.00001
29.0000	34.4753	5.65272	6593.90	5.65273	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

