

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0818
CALIBRATION DATE: 07-Dec-07

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

COEFFICIENTS:

g = -1.070092e+000
h = 1.551321e-001
i = -4.690253e-004
j = 6.075950e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.3731e-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	2635.45	0.00000	0.00000
1.0000	34.7346	2.96965	5116.55	2.96963	-0.00001
4.5000	34.7139	3.27601	5307.21	3.27603	0.00002
15.0000	34.6706	4.25563	5875.05	4.25563	-0.00000
18.5000	34.6618	4.60008	6061.94	4.60007	-0.00001
24.0000	34.6525	5.15695	6352.30	5.15695	0.00001
29.0000	34.6477	5.67780	6612.14	5.67780	-0.00000
32.5000	34.6451	6.04950	6791.38	6.04951	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

