

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4254
CALIBRATION DATE: 31-Oct-08

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

COEFFICIENTS:

g = -1.022629e+000
h = 1.517158e-001
i = -1.189069e-004
j = 3.471558e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 8.9558e-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	2596.62	0.00000	0.00000
0.9999	34.8955	2.98208	5132.57	2.98210	0.00002
4.5000	34.8755	3.28976	5325.19	3.28975	-0.00000
15.0000	34.8322	4.27336	5898.10	4.27332	-0.00004
18.5000	34.8227	4.61913	6086.43	4.61912	-0.00000
24.0000	34.8122	5.17808	6378.81	5.17812	0.00004
29.0000	34.8059	5.70081	6640.23	5.70082	0.00002
32.5000	34.8012	6.07365	6820.37	6.07363	-0.00002

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

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

