

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 3318
CALIBRATION DATE: 16-Dec-08

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

COEFFICIENTS:

g = -1.023373e+000
h = 1.402257e-001
i = -3.995462e-004
j = 5.321711e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -5.6324e-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	2708.34	0.00000	0.00000
1.0000	34.7063	2.96746	5346.58	2.96750	0.00004
4.5000	34.6861	3.27365	5547.21	3.27362	-0.00003
15.0000	34.6421	4.25250	6143.99	4.25247	-0.00003
18.4999	34.6320	4.59654	6340.07	4.59650	-0.00004
24.0000	34.6197	5.15260	6644.43	5.15265	0.00005
28.9999	34.6108	5.67243	6916.40	5.67249	0.00006
32.4999	34.6032	6.04301	7103.62	6.04295	-0.00005

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

$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

