

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1246
CALIBRATION DATE: 10-Dec-09

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

COEFFICIENTS:

g = -1.031033e+000
h = 1.516521e-001
i = -1.038256e-004
j = 3.415019e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.7464e-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	2608.55	0.00000	0.00000
1.0000	34.8076	2.97529	5133.71	2.97531	0.00001
4.5000	34.7880	3.28232	5326.20	3.28231	-0.00001
15.0000	34.7451	4.26380	5898.98	4.26379	-0.00001
18.4999	34.7356	4.60881	6087.31	4.60880	-0.00001
24.0000	34.7245	5.16648	6379.76	5.16650	0.00003
29.0000	34.7173	5.68793	6641.29	5.68793	0.00001
32.5001	34.7134	6.06008	6821.66	6.06007	-0.00001

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

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

t = temperature[°C]; p = pressure[decibars]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

