

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1244
CALIBRATION DATE: 12-Jun-09

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

COEFFICIENTS:

g = -1.040081e+000
h = 1.572646e-001
i = 4.346133e-007
j = 2.775453e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8870e-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	2571.00	0.00000	0.00000
0.9999	34.5767	2.95742	5030.51	2.95737	-0.00005
4.4999	34.5537	3.26237	5218.34	3.26244	0.00007
15.0001	34.5082	4.23781	5777.50	4.23783	0.00003
18.5000	34.4972	4.58058	5961.32	4.58053	-0.00005
24.0001	34.4853	5.13481	6246.99	5.13481	0.00000
29.0000	34.4753	5.65272	6502.36	5.65273	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

