

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1245
CALIBRATION DATE: 17-Nov-06

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

COEFFICIENTS:

g = -1.056396e+000

CPcor = -9.5700e-008

h = 1.627215e-001

CTcor = 3.2500e-006

i = 5.513349e-006

WBOTC = -3.0022e-005

j = 3.009451e-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	2547.16	0.00000	0.00000
1.0000	34.7225	2.96871	4961.93	2.96871	0.00000
4.5000	34.7014	3.27495	5146.62	3.27495	0.00000
14.9999	34.6566	4.25408	5696.52	4.25407	-0.00001
18.5000	34.6463	4.59824	5877.41	4.59824	-0.00001
24.0000	34.6348	5.15460	6158.40	5.15462	0.00002
29.0000	34.6278	5.67491	6409.80	5.67491	0.00000
32.5000	34.6245	6.04632	6583.26	6.04631	-0.00001

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

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

