

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0269
CALIBRATION DATE: 08-Feb-11

SBE 45 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.869526e-001	CPcor = -9.5700e-008
h = 1.358926e-001	CTcor = 3.2500e-006
i = -3.831200e-004	WBOTC = 6.7862e-007
j = 4.791677e-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	2701.75	0.00000	0.00000
1.0000	34.6695	2.96461	5405.82	2.96461	-0.00000
4.5000	34.6495	3.27053	5610.58	3.27054	0.00000
15.0000	34.6065	4.24859	6219.23	4.24859	-0.00000
18.5000	34.5971	4.59242	6419.17	4.59242	0.00001
23.9999	34.5866	5.14821	6729.44	5.14820	-0.00001
29.0000	34.5793	5.66785	7006.71	5.66786	0.00001
32.5000	34.5741	6.03851	7197.71	6.03851	-0.00000

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

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

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

Residual = instrument conductivity - bath conductivity

