

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0360
CALIBRATION DATE: 14-Mar-12

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

COEFFICIENTS:

g = -9.981886e-001	CPcor = -9.5700e-008
h = 1.354188e-001	CTcor = 3.2500e-006
i = -1.618257e-004	WBOTC = 5.5203e-007
j = 3.149271e-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	2717.04	0.00000	0.00000
1.0000	35.0620	2.99495	5429.24	2.99496	0.00001
4.5000	35.0411	3.30383	5634.52	3.30382	-0.00001
15.0000	34.9956	4.29127	6244.89	4.29128	0.00001
18.5000	34.9854	4.63837	6445.41	4.63836	-0.00001
23.9999	34.9720	5.19921	6756.56	5.19922	0.00001
29.0000	34.9633	5.72368	7034.72	5.72367	-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

