

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0361
CALIBRATION DATE: 27-Sep-11

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

COEFFICIENTS:

g = -9.836598e-001	CPcor = -9.5700e-008
h = 1.380809e-001	CTcor = 3.2500e-006
i = -1.425081e-004	WBOTC = 1.5603e-007
j = 3.151561e-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	2670.55	0.00000	0.00000
1.0000	34.9807	2.98867	5360.85	2.98867	-0.00000
4.5000	34.9601	3.29695	5564.18	3.29695	-0.00000
15.0000	34.9165	4.28260	6168.65	4.28261	0.00001
18.5000	34.9075	4.62916	6367.26	4.62916	0.00000
24.0000	34.8973	5.18934	6675.49	5.18933	-0.00001
29.0000	34.8910	5.71317	6951.02	5.71316	-0.00001
32.5001	34.8867	6.08689	7140.91	6.08690	0.00001

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

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

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

Residual = instrument conductivity - bath conductivity

