

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0385
CALIBRATION DATE: 01-May-15

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

COEFFICIENTS:

g = -9.837510e-001
h = 1.333929e-001
i = -1.152932e-004
j = 2.744670e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 2.7605e-007

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	2716.78	0.00000	0.00000
1.0000	34.7202	2.96853	5439.47	2.96852	-0.00001
4.5000	34.7004	3.27487	5645.55	3.27487	0.00001
14.9999	34.6580	4.25423	6258.19	4.25424	0.00000
18.4999	34.6486	4.59851	6459.48	4.59852	0.00001
24.0000	34.6381	5.15504	6771.91	5.15503	-0.00001
29.0000	34.6315	5.67545	7051.21	5.67543	-0.00001
32.5000	34.6265	6.04663	7243.67	6.04664	0.00001

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

$$\text{Conductivity} = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p) \text{ Siemens / meter}$$

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

Residual = instrument conductivity - bath conductivity

