

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0454
CALIBRATION DATE: 01-May-15

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

COEFFICIENTS:

g = -9.869070e-001
h = 1.321048e-001
i = -3.050122e-004
j = 3.981350e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 2.4343e-006

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	2738.74	0.00000	0.00000
1.0000	34.7202	2.96853	5481.77	2.96853	-0.00000
4.5000	34.7004	3.27487	5689.46	3.27486	-0.00000
14.9999	34.6580	4.25423	6306.88	4.25425	0.00002
18.4999	34.6486	4.59851	6509.69	4.59851	0.00000
24.0000	34.6381	5.15504	6824.46	5.15501	-0.00003
29.0000	34.6315	5.67545	7105.84	5.67546	0.00001
32.5000	34.6265	6.04663	7299.69	6.04669	0.00006

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

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

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

Residual = instrument conductivity - bath conductivity

