

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0470
CALIBRATION DATE: 21-Oct-15

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.047507e+000
h = 1.455985e-001
i = -4.020280e-004
j = 5.022132e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.6926e-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	2691.17	0.00000	0.00000
1.0000	34.6337	2.96184	5260.89	2.96183	-0.00001
4.5000	34.6136	3.26748	5458.00	3.26749	0.00001
15.0000	34.5702	4.24461	6044.85	4.24460	-0.00001
18.5000	34.5606	4.58809	6237.93	4.58810	0.00000
24.0000	34.5500	5.14337	6537.85	5.14337	-0.00001
29.0000	34.5439	5.66270	6806.24	5.66271	0.00000
32.5000	34.5402	6.03326	6991.34	6.03326	-0.00000

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

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

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

Residual = instrument conductivity - bath conductivity

