

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0475
CALIBRATION DATE: 29-Oct-13

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

COEFFICIENTS:

g = -1.042007e+000
h = 1.411140e-001
i = -3.644613e-004
j = 4.949079e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.3216e-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	2725.92	0.00000	0.00000
1.0000	34.7748	2.97276	5344.25	2.97275	-0.00001
4.5000	34.7548	3.27949	5544.81	3.27951	0.00002
15.0000	34.7117	4.26014	6141.77	4.26012	-0.00002
18.5000	34.7027	4.60492	6338.17	4.60492	-0.00001
24.0000	34.6929	5.16230	6643.22	5.16232	0.00003
29.0000	34.6877	5.68362	6916.13	5.68361	-0.00001

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

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

t = temperature[°C]; p = pressure[decibars]; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

Residual = instrument conductivity - bath conductivity

