

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3777
CALIBRATION DATE: 29-Oct-13

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

COEFFICIENTS:

g = -1.052127e+000
h = 1.359742e-001
i = -2.352635e-004
j = 3.645338e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -5.5036e-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	2785.66	0.00000	0.00000
1.0000	34.7748	2.97276	5444.67	2.97277	0.00002
4.5000	34.7548	3.27949	5647.67	3.27948	-0.00002
15.0000	34.7117	4.26014	6251.89	4.26012	-0.00001
18.5000	34.7027	4.60492	6450.61	4.60492	-0.00000
24.0000	34.6929	5.16230	6759.20	5.16231	0.00002
29.0000	34.6877	5.68362	7035.24	5.68363	0.00001
32.5000	34.6849	6.05566	7225.58	6.05565	-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

