

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4078
CALIBRATION DATE: 05-Feb-14

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

COEFFICIENTS:

g = -1.035679e+000
h = 1.485177e-001
i = -1.165640e-004
j = 3.424292e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -1.0787e-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	2641.65	0.00000	0.00000
1.0000	34.7364	2.96979	5187.73	2.96978	-0.00000
4.5000	34.7166	3.27624	5381.80	3.27625	0.00001
15.0000	34.6741	4.25601	5959.24	4.25601	-0.00000
18.5000	34.6649	4.60045	6149.10	4.60044	-0.00001
24.0000	34.6546	5.15723	6443.93	5.15724	0.00001
29.0000	34.6484	5.67791	6707.60	5.67790	-0.00000

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

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

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

Residual = instrument conductivity - bath conductivity

