

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0678
CALIBRATION DATE: 16-Aug-13

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

COEFFICIENTS:

g = -1.007279e+000
h = 1.388022e-001
i = -3.214065e-004
j = 4.583663e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -8.0712e-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	2701.46	0.00000	0.00000
1.0000	34.8473	2.97836	5366.65	2.97836	0.00000
4.5000	34.8275	3.28568	5569.79	3.28568	0.00000
15.0000	34.7849	4.26817	6174.12	4.26814	-0.00002
18.5000	34.7758	4.61358	6372.84	4.61359	0.00001
24.0000	34.7660	5.17197	6681.39	5.17198	0.00001
29.0000	34.7608	5.69425	6957.39	5.69424	-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

