

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: 2448
CALIBRATION DATE: 29-Oct-13

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

COEFFICIENTS:

g = -1.030718e+000
h = 1.468549e-001
i = -2.123851e-004
j = 3.904599e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 7.2604e-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	2651.66	0.00000	0.00000
1.0000	34.7748	2.97276	5222.03	2.97276	0.00001
4.5000	34.7548	3.27949	5417.60	3.27949	-0.00001
15.0000	34.7117	4.26014	5999.42	4.26013	-0.00001
18.5000	34.7027	4.60492	6190.71	4.60492	-0.00001
24.0000	34.6929	5.16230	6487.71	5.16232	0.00002
29.0000	34.6877	5.68362	6753.31	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

