

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: 4590
CALIBRATION DATE: 20-Apr-12

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

COEFFICIENTS:

g = -1.012523e+000
h = 1.411104e-001
i = -1.795992e-004
j = 3.728382e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -6.8062e-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	2680.92	0.00000	0.00000
1.0000	34.9836	2.98890	5323.23	2.98890	0.00000
4.5000	34.9632	3.29721	5523.71	3.29721	-0.00001
15.0000	34.9202	4.28301	6119.97	4.28301	0.00001
18.5000	34.9114	4.62962	6315.94	4.62962	-0.00000
24.0000	34.9017	5.18992	6620.15	5.18992	-0.00000
29.0000	34.8969	5.71403	6892.21	5.71403	0.00000
32.5000	34.8948	6.08813	7079.79	6.08813	-0.00000

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

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

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

$$\text{Residual} = \text{instrument conductivity} - \text{bath conductivity}$$

