

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: 1244
CALIBRATION DATE: 18-Apr-12

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

COEFFICIENTS:

g = -1.041582e+000
h = 1.578719e-001
i = -1.863098e-004
j = 4.243978e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -2.8870e-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	2571.02	0.00000	0.00000
1.0000	34.7981	2.97456	5041.60	2.97458	0.00002
4.4999	34.7775	3.28142	5230.14	3.28139	-0.00002
14.9999	34.7332	4.26249	5791.37	4.26247	-0.00002
18.5000	34.7237	4.60741	5975.96	4.60741	-0.00000
24.0000	34.7132	5.16498	6262.62	5.16500	0.00002
29.0000	34.7074	5.68649	6519.06	5.68650	0.00001
32.5000	34.7042	6.05865	6695.90	6.05863	-0.00002

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

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

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

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

