

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: 1853
CALIBRATION DATE: 06-Feb-14

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

COEFFICIENTS:

g = -9.865574e-001
h = 1.357536e-001
i = -1.428370e-004
j = 3.353313e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 1.6066e-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	2697.14	0.00000	0.00000
1.0000	34.6850	2.96581	5391.69	2.96579	-0.00002
4.5000	34.6651	3.27186	5595.65	3.27189	0.00003
15.0000	34.6223	4.25033	6201.82	4.25033	0.00000
18.5000	34.6129	4.59429	6400.95	4.59428	-0.00001
24.0000	34.6024	5.15031	6710.01	5.15031	-0.00001
29.0000	34.5961	5.67030	6986.29	5.67030	0.00001

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

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

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

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

