

# 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: 2023  
CALIBRATION DATE: 09-Dec-11

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

## COEFFICIENTS:

g = -1.037507e+000  
h = 1.494365e-001  
i = -1.255807e-004  
j = 4.625266e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -2.5476e-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	2635.74	0.00000	0.00000
1.0000	34.9860	2.98908	5180.75	2.98913	0.00005
4.4999	34.9656	3.29741	5374.38	3.29736	-0.00005
15.0000	34.9212	4.28312	5950.49	4.28305	-0.00006
18.5000	34.9111	4.62958	6139.92	4.62973	0.00014
24.0000	34.8997	5.18966	6433.63	5.18946	-0.00020
29.0000	34.8919	5.71330	6696.56	5.71353	0.00023
32.5000	34.8848	6.08658	6877.32	6.08648	-0.00010

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

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

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

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

