

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: 0417
CALIBRATION DATE: 30-Oct-13

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

COEFFICIENTS:

g = -1.056035e+000
h = 1.449189e-001
i = -4.699298e-004
j = 5.739503e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -7.1987e-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	2709.57	0.00000	0.00000
1.0000	34.6908	2.96626	5284.63	2.96627	0.00001
4.4999	34.6708	3.27234	5482.16	3.27233	-0.00001
15.0000	34.6279	4.25094	6070.34	4.25093	-0.00001
18.5000	34.6190	4.59501	6263.86	4.59500	-0.00001
24.0000	34.6093	5.15123	6564.45	5.15124	0.00001
29.0000	34.6046	5.67153	6833.43	5.67155	0.00001
32.5000	34.6022	6.04286	7018.94	6.04285	-0.00001

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

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

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

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

