

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 3429
CALIBRATION DATE: 11-Dec-07

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

COEFFICIENTS:

g = -1.033415e+000
h = 1.410419e-001
i = -2.264658e-004
j = 3.867350e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -4.2428e-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	2710.14	0.00000	0.00000
1.0000	35.1574	3.00232	5351.19	3.00234	0.00002
4.5000	35.1364	3.31193	5551.95	3.31193	0.00001
15.0000	35.0925	4.30189	6149.20	4.30185	-0.00004
18.5000	35.0834	4.64996	6345.57	4.64992	-0.00003
24.0000	35.0731	5.21258	6650.44	5.21262	0.00004
29.0000	35.0665	5.73866	6923.00	5.73874	0.00008
32.5000	35.0613	6.11386	7110.72	6.11379	-0.00006

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

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

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

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

