

SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

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

SENSOR SERIAL NUMBER: 1865
CALIBRATION DATE: 21-Dec-10

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

COEFFICIENTS:

g = -9.757070e-001

CPcor = -9.5700e-008

h = 1.345251e-001

CTcor = 3.2500e-006

i = -9.463470e-005

WBOTC = 2.0729e-006

j = 2.982811e-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	2693.46	0.00000	0.00000
1.0000	34.8587	2.97924	5414.84	2.97925	0.00000
4.5000	34.8384	3.28660	5620.31	3.28661	0.00000
15.0000	34.7943	4.26920	6230.93	4.26918	-0.00002
18.5000	34.7846	4.61462	6431.50	4.61461	-0.00001
23.9999	34.7730	5.17289	6742.71	5.17291	0.00003
29.0000	34.7660	5.69501	7020.89	5.69501	0.00000
32.5000	34.7603	6.06733	7212.48	6.06732	-0.00001

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

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

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

