

# 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: 2332  
CALIBRATION DATE: 14-Dec-11

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

## COEFFICIENTS:

g = -9.967208e-001

CPcor = -9.5700e-008

h = 1.500279e-001

CTcor = 3.2500e-006

i = -1.416375e-004

WBOTC = 5.3329e-006

j = 3.774716e-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	2578.34	0.00000	0.00000
1.0000	34.9392	2.98547	5147.34	2.98547	0.00001
4.5000	34.9188	3.29344	5341.76	3.29344	-0.00000
14.9999	34.8744	4.27798	5919.75	4.27795	-0.00002
18.4999	34.8645	4.62406	6109.65	4.62407	0.00001
23.9999	34.8529	5.18346	6404.36	5.18348	0.00002
29.0000	34.8441	5.70636	6667.68	5.70634	-0.00002
32.5001	34.8370	6.07920	6849.07	6.07920	0.00000

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

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

t = temperature[°C]; p = pressure[decibars];  $\delta$  = CTcor;  $\epsilon$  = CPcor;

Residual = instrument conductivity - bath conductivity

