

# 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: 2251

CALIBRATION DATE: 06-May-15

SBE 4 CONDUCTIVITY CALIBRATION DATA

PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

## COEFFICIENTS:

g = -1.03674299e+001

h = 1.36556476e+000

i = -2.23857363e-003

j = 2.19351918e-004

CPcor = -9.5700e-008 (nominal)

CTcor = 3.2500e-006 (nominal)

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (kHz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
0.0000	0.0000	0.00000	2.75993	0.00000	0.00000
-1.0000	34.7310	2.79834	5.31053	2.79832	-0.00002
1.0000	34.7311	2.96938	5.42768	2.96940	0.00002
15.0000	34.7311	4.26227	6.24186	4.26226	-0.00001
18.5000	34.7300	4.60815	6.44215	4.60818	0.00002
29.0000	34.7288	5.68960	7.03120	5.68956	-0.00004
32.5000	34.7250	6.06187	7.22277	6.06189	0.00002

f = INST FREQ / 1000.0

Conductivity =  $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$  Siemens / meter

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

Residual = instrument conductivity - bath conductivity

