

# 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: 4229

CALIBRATION DATE: 24-Apr-14

SBE 4 CONDUCTIVITY CALIBRATION DATA

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

## COEFFICIENTS:

g = -9.73937240e+000

h = 1.50361823e+000

i = -1.40181978e-003

j = 1.98618128e-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	2.54699	0.00000	0.00000
-1.0000	34.6222	2.79039	5.00691	2.79040	0.00000
1.0000	34.6229	2.96100	5.11901	2.96101	0.00000
15.0000	34.6235	4.25046	5.89731	4.25044	-0.00001
18.5000	34.6230	4.59549	6.08858	4.59548	-0.00001
29.0000	34.6210	5.67392	6.65072	5.67397	0.00005
32.5000	34.6143	6.04474	6.83316	6.04471	-0.00003

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

