

# 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: 3451

CALIBRATION DATE: 28-Apr-15

SBE 4 CONDUCTIVITY CALIBRATION DATA

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

## COEFFICIENTS:

g = -1.02582330e+001

h = 1.59346154e+000

i = -2.55566670e-003

j = 2.97786818e-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	2.54091	0.00000	0.00000
-1.0000	34.5979	2.78862	4.90092	2.78862	0.00001
1.0000	34.5989	2.95915	5.00921	2.95914	-0.00001
15.0000	34.5994	4.24781	5.76174	4.24782	0.00001
18.5000	34.5993	4.59268	5.94684	4.59266	-0.00001
29.0000	34.5980	5.67057	6.49111	5.67059	0.00002
32.5000	34.5915	6.04121	6.66785	6.04120	-0.00001

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

