

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: 0813

CALIBRATION DATE: 11-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.035519e+000

h = 1.501124e-001

i = -3.217030e-004

j = 4.864338e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -7.1758e-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	2633.01	0.00000	0.00000
0.9999	34.6864	2.96591	5169.41	2.96590	-0.00001
4.5000	34.6660	3.27194	5363.49	3.27194	0.00000
14.9999	34.6219	4.25027	5941.17	4.25028	0.00001
18.4999	34.6114	4.59410	6131.12	4.59409	-0.00001
23.9999	34.5988	5.14983	6426.13	5.14983	0.00001
29.0001	34.5908	5.66954	6690.05	5.66952	-0.00002
32.5000	34.5845	6.04012	6871.96	6.04013	0.00001

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

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

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

Residual = instrument conductivity - bath conductivity

