

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: 0817

CALIBRATION DATE: 13-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.091725e+000

h = 1.389917e-001

i = -2.703205e-005

j = 2.263415e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -1.3113e-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	2801.98	0.00000	0.00000
0.9999	34.7298	2.96927	5395.40	2.96924	-0.00002
4.5000	34.7100	3.27568	5594.56	3.27572	0.00004
15.0000	34.6678	4.25532	6187.61	4.25529	-0.00003
18.4999	34.6585	4.59968	6382.79	4.59967	-0.00001
24.0000	34.6474	5.15627	6685.98	5.15630	0.00002
29.0000	34.6399	5.67667	6957.22	5.67667	0.00000
32.5000	34.6319	6.04746	7144.05	6.04745	-0.00001

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

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

