

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: 3936

CALIBRATION DATE: 16-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.017423e+000

h = 1.415356e-001

i = -9.110250e-005

j = 2.838337e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = 7.1795e-006

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	2681.30	0.00000	0.00000
0.9999	34.6986	2.96685	5299.80	2.96686	0.00001
4.5000	34.6785	3.27300	5498.76	3.27299	-0.00001
15.0000	34.6356	4.25179	6090.63	4.25179	0.00000
18.4999	34.6240	4.59559	6285.02	4.59559	-0.00000
24.0000	34.6128	5.15169	6587.01	5.15169	0.00000
29.0000	34.6063	5.67178	6857.09	5.67178	-0.00000
32.5000	34.6008	6.04265	7043.20	6.04272	0.00008

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

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

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

Residual = instrument conductivity - bath conductivity

