

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0827

CALIBRATION DATE: 13-Sep-14

SBE 37 CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -1.035798e+000

h = 1.584567e-001

i = 1.426284e-005

j = 2.769579e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = -2.7313e-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	2555.73	0.00000	0.00000
0.9999	34.7298	2.96927	5015.41	2.96928	0.00001
4.5000	34.7100	3.27568	5203.08	3.27567	-0.00001
15.0000	34.6678	4.25532	5761.66	4.25530	-0.00002
18.4999	34.6585	4.59968	5945.36	4.59968	-0.00000
24.0000	34.6474	5.15627	6230.63	5.15630	0.00003
29.0000	34.6399	5.67667	6485.74	5.67665	-0.00002
32.5000	34.6319	6.04746	6661.24	6.04702	-0.00044

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

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

