

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1866
CALIBRATION DATE: 15-Jan-12

SBE 37 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -9.733154e-001

CPcor = -9.5700e-008

h = 1.348674e-001

CTcor = 3.2500e-006

i = -1.660543e-004

WBOTC = 2.9139e-006

j = 3.489526e-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	2688.27	0.00000	0.00000
1.0000	34.7182	2.96838	5403.70	2.96837	-0.00001
4.5000	34.6976	3.27463	5608.78	3.27465	0.00002
15.0000	34.6544	4.25385	6218.26	4.25384	-0.00001
18.5000	34.6446	4.59804	6418.42	4.59804	-0.00000
24.0000	34.6333	5.15440	6729.01	5.15440	-0.00001
29.0000	34.6255	5.67457	7006.56	5.67459	0.00002
32.5000	34.6185	6.04539	7197.63	6.04538	-0.00001

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

Conductivity = $(g + hf^2 + if^3 + jf^4) / (1 + \delta t + \epsilon p)$ Siemens/meter

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

Residual = instrument conductivity - bath conductivity

