

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1850
CALIBRATION DATE: 05-Feb-14

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

COEFFICIENTS:

g = -9.693166e-001

CPcor = -9.5700e-008

h = 1.369227e-001

CTcor = 3.2500e-006

i = -1.680312e-004

WBOTC = 2.0033e-006

j = 3.706371e-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	2662.43	0.00000	0.00000
1.0000	34.6873	2.96599	5357.88	2.96600	0.00001
4.5000	34.6678	3.27209	5561.37	3.27208	-0.00001
15.0000	34.6263	4.25076	6166.10	4.25073	-0.00003
18.5000	34.6176	4.59485	6364.75	4.59486	0.00002
24.0000	34.6081	5.15107	6672.97	5.15109	0.00003
29.0000	34.6024	5.67121	6948.39	5.67120	-0.00002

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

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

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

Residual = instrument conductivity - bath conductivity

