

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1810
CALIBRATION DATE: 06-Feb-14

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

COEFFICIENTS:

g = -9.830631e-001

CPcor = -9.5700e-008

h = 1.367103e-001

CTcor = 3.2500e-006

i = -2.055497e-004

WBOTC = 3.0426e-006

j = 3.882644e-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	2684.16	0.00000	0.00000
1.0000	34.6850	2.96581	5374.14	2.96580	-0.00001
4.5000	34.6651	3.27186	5577.61	3.27188	0.00002
15.0000	34.6223	4.25033	6182.30	4.25030	-0.00002
18.5000	34.6129	4.59429	6380.94	4.59429	0.00000
24.0000	34.6024	5.15031	6689.18	5.15032	0.00001
29.0000	34.5961	5.67030	6964.69	5.67031	0.00001
32.5000	34.5917	6.04124	7154.50	6.04123	-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

