

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3770
CALIBRATION DATE: 18-Jan-12

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

COEFFICIENTS:

g = -1.036555e+000
h = 1.618242e-001
i = -1.954082e-004
j = 4.338836e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = -1.0296e-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	2532.88	0.00000	0.00000
0.9997	34.9500	2.98627	4984.35	2.98629	0.00001
4.4999	34.9286	3.29426	5170.98	3.29423	-0.00004
15.0000	34.8847	4.27911	5726.56	4.27916	0.00005
18.5000	34.8748	4.62529	5909.17	4.62529	0.00000
24.0000	34.8635	5.18487	6192.73	5.18484	-0.00003
29.0000	34.8553	5.70799	6446.27	5.70796	-0.00002
32.5000	34.8479	6.08088	6620.93	6.08090	0.00002

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

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

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

Residual = instrument conductivity - bath conductivity

