

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1860
CALIBRATION DATE: 10-Dec-11

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

COEFFICIENTS:

g = -1.031694e+000
h = 1.440441e-001
i = -1.802422e-004
j = 3.867317e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 4.4809e-006

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	2678.03	0.00000	0.00000
1.0000	34.8490	2.97849	5274.08	2.97852	0.00002
4.5000	34.8279	3.28571	5471.45	3.28570	-0.00001
15.0000	34.7821	4.26786	6058.59	4.26783	-0.00003
18.5000	34.7708	4.61298	6251.50	4.61296	-0.00002
24.0000	34.7580	5.17091	6551.05	5.17096	0.00005
29.0000	34.7478	5.69236	6818.70	5.69239	0.00003
32.4999	34.7388	6.06399	7002.97	6.06396	-0.00003

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

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

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

Residual = instrument conductivity - bath conductivity

